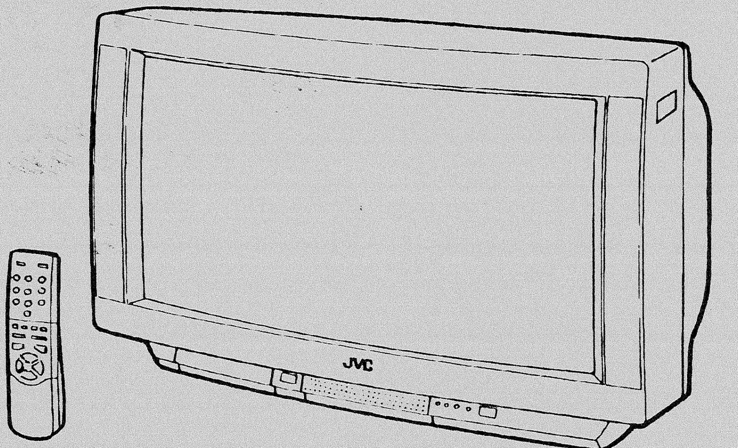
JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
MB

AV-32WZ2EN(A)
AV-32WZ2EP(A)
AV-28WZ2EN(A)
AV-28WZ2EP(A)



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- ★ STANDARD CIRCUIT DIAGRAM 2-1

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No. 51239C
Dec. 1997

SPECIFICATIONS

Item	Content	
	32'	28'
Dimensions (W × H × D)	805mm × 550mm × 550mm	716mm × 489mm × 496mm
Mass	54.8kg	40.1kg
TV RF System	CCIR(B/G,I,L) EN MODEL:B/G ONLY	CCIR(B/G,I,L) EN MODEL:B/G ONLY
Colour System	PAL / SECAM / NTSC(Only in EXT mode)	PAL / SECAM / NTSC(Only in EXT mode)
Stereo System	A2/NICAM	A2/NICAM
Teletext System	TOP/FLOF	TOP/FLOF
Receiving Frequency		
VHF	47MHz~ 470MHz	47MHz~ 470MHz
UHF	470MHz~862MHz	470MHz~862MHz
Intermediate Frequency		
VIF Carrier	38.9MHz(B/G,I,L) EN MODEL:B/G ONLY	38.9MHz(B/G,I,L) EN MODEL:B/G ONLY
SIF Carrier	33.4(5.5MHz),33.5(6.0MHz) EN MODEL: 5.5MHz ONLY	33.4(5.5MHz),33.5(6.0MHz) EN MODEL: 5.5MHz ONLY
Colour Sub Carrier Freq.		
PAL	4.43MHz	4.43MHz
SECAM	4.0625MHz / 4.25MHz	4.0625MHz / 4.25MHz
NTSC	3.58MHz / 4.43MHz	3.58MHz / 4.43MHz
Power Input	AC 220V~240V , 50Hz	AC 220V~240V , 50Hz
Power Consumption	160W(Max) /150W(Avg)	155W(Max) /145W(Avg)
Picture Tube	Visible size : 76cm, Measured diagonally	Visible size : 66cm, Measured diagonally
High Voltage	31.0Kv +1kV -1.5kV (at zero beam current)	31.0Kv (at zero beam current)
Speaker	φ10cm round (4Ω) × 2	φ10cm round (4Ω) × 2
Audio Output	20W + 20W	20W + 20W
EXT-1/EXT-2/EXT-3 (Input/Output)	21-pin Euro connector(SCART socket)	21-pin Euro connector(SCART socket)
EXT4(Input) Video	1Vp-p 75Ω(RCA pin jack)	1Vp-p 75Ω(RCA pin jack)
Audio(L/R)	500mVrms(-4dBs), High Impedance (RCA pin jack)	500mVrms(-4dBs), High Impedance (RCA pin jack)
Aerial Input Term	75Ω unbalanced, Coaxial	75Ω unbalanced, Coaxial
Headphone jack	Stereo mini jack (φ3.5mm)	Stereo mini jack (φ3.5mm)
Remote Control Unit	RM-C793 AAA(R03) dry battery × 2	RM-C793 AAA(R03) dry battery × 2

Design & specification are subject to change without notice.

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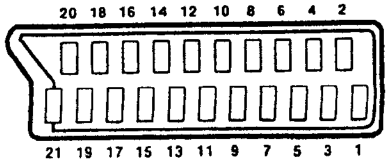
■21-pin Euro connector (SCART socket) : EXT-1 / EXT-2 / EXT-3

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT-1	EXT-2	EXT-3
1	AUDIO R output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (LINE OUT)	NC
2	AUDIO R input	500mVrms(Nominal), High impedance	○	○	○
3	AUDIO L output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (LINE OUT)	NC
4	AUDIO GND		○	○	○
5	GND (B)		○	○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○	○
7	B input	700mV$_{B-W}$, 75Ω	○	NC	NC
8	FUNCTON SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	○	○
9	GND (G)		○	○	○
10	–		NC	–	NC
10	SCL3		–	○	–
11	G input	700mV$_{B-W}$, 75Ω	○	NC	NC
12	–		NC	–	NC
12	SDA3		–	○	–
13	GND (R)		○	○	○
14	GND (Y_S)		○	NC	NC
15	R / C input	R : 700mV$_{B-W}$, 75Ω C : 300mV$_{P-P}$, 75Ω	○ (only R)	○ (only C)	○ (only C)
16	Ys input	Low : 0 - 0.4, High : 1 - 3V, 75Ω	○	NC	NC
17	GND(VIDEO output)		○	○	○
18	GND(VIDEO input)		○	○	○
19	VIDEO output	1V$_{S-W}$(Negative going sync), 75Ω	○ (TV)	○ (LINE OUT)	NC
20	VIDEO / Y input	1V$_{S-W}$(Negative going sync), 75Ω	○	○	○
21	COMMON GND		○	○	○

[Pin assignment]



SAFETY PRCATIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⊜) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

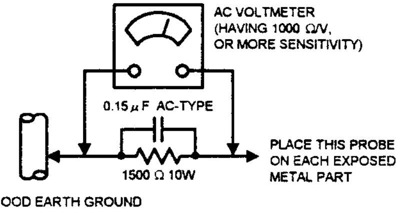
9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) Dielectric Strength Test
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) Leakage Current Check
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

- **Alternate Check Method**

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).



SPECIFIC SERVICE INSTRUCTIONS

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

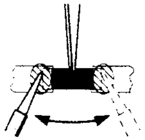
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

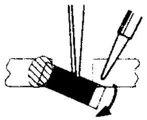
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

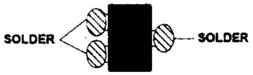


(2) Shift with tweezers and remove the chip part.

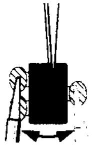


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

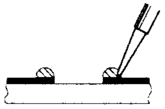


Note : After removing the part, remove remaining solder from the pattern.

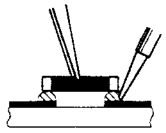
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.

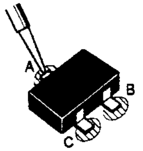


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

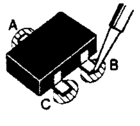


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.

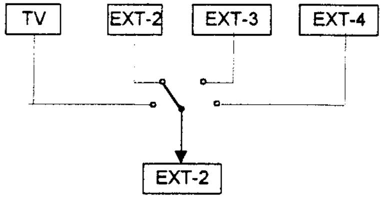


(4) Then solder leads **B** and **C**.



FEATURES

- By preference, users can select the picture size from PANORAMIC, REGULAR, FULL, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUB TITLE modes. When the TV unit received WSS picture signal, the picture can be changed to 16:9 ZOOM mode automatically.
- The TELETEXT SYSTEM has a built-in TOP and FLOF system.
- Thanks to the newly employed DSP control micro computer, users can select 3D-PHONIC, and enjoy Surround effect at each mode.
- Because this TV unit corresponds to multiplex broadcast, users can enjoy music programs and sporting events with live realism. In addition, BILINGUAL programs can be heard in their original language.
- In accordance with the brightness in a room, the brightness and/or contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
- Users can make VTR dubbing of picture and sound by controlling the AV selector to select an optional source at the EXT-2 output shown in figure.



DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 13 screws marked "A" as shown in the Fig. 1.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
2. Withdraw the chassis backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERMINAL BOARD

- After removing the rear cover.

1. Remove the 6 screws marked "B" as shown in the Fig. 1.
2. While raising the claw marked "C", remove the top of the AV TERMINAL BOARD slightly in the direction of arrow "D" as shown in Fig. 2.

REMOVING THE SPEAKER BOX

- After removing the rear cover.

1. Remove the 2 screws marked "E" as shown in Fig. 1.
2. Follow the same steps when removing the other hand speaker box.

NOTE : When removing the screws marked "E" of the speaker box, remove the lower side screw first, and then remove the upper screw.

CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

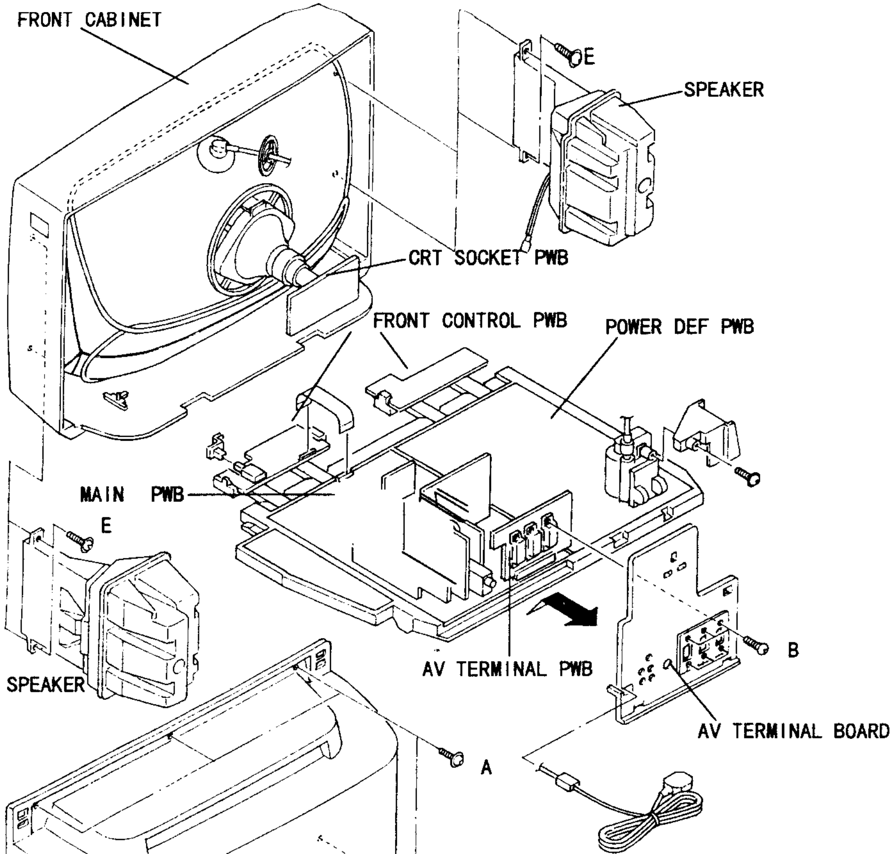


Fig. 1

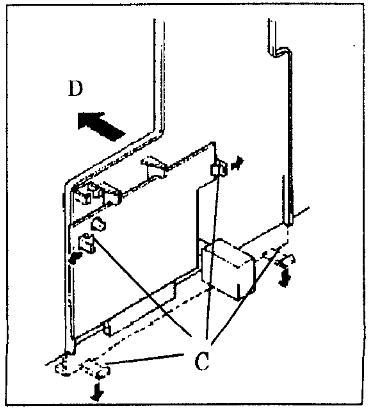


Fig. 2

REMOVING THE CRT

*Replacement of the CRT should be performed by 2 or more persons.

- After removing the cover, chassis etc..,

1. **Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).**
2. **While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.4.**
3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.4.

- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.

- The CRT should be assembled according to the opposite sequence of its dismounting steps.
- The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

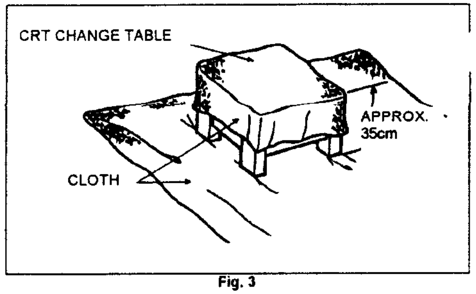


Fig. 3

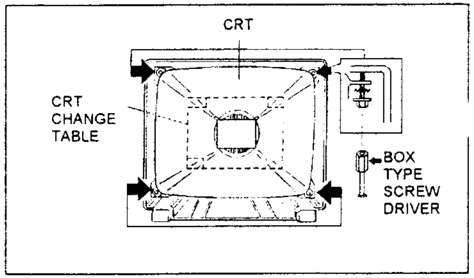


Fig. 4

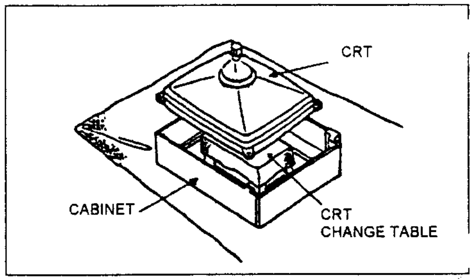


Fig. 5

COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.6.
  Wipe around the anode button with clean and dry cloth. (Fig.6)
  Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not stick to the anode button. (Fig.7)

★ **Silicon grease product No. KS - 650N**

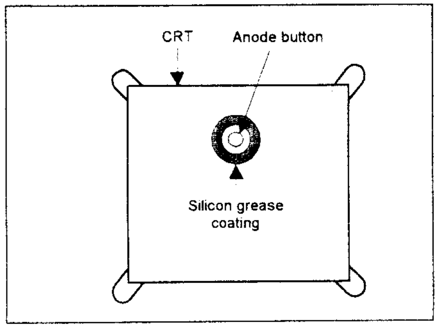


Fig. 6

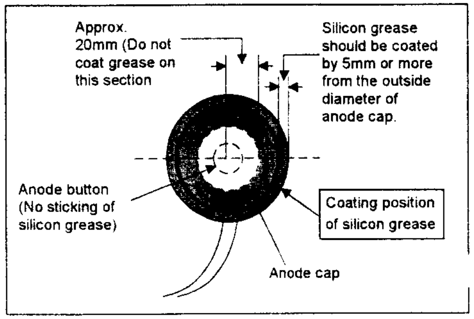

Approx. 20mm (Do not coat grease on this section
Silicon grease should be coated by 5mm or more from the outside diameter of anode cap.
Anode button (No sticking of silicon grease)
Coating position of silicon grease
Anode cap

Fig. 7

REPLACEMENT OF MEMORY ICs

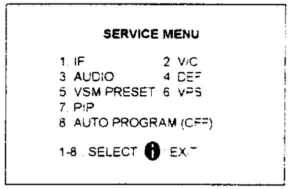
1. Memory ICs

This TV use memory ICs (EEP-ROM IC). In the memory ICs, there are memorized data for correctly operating the video and deflection circuits. **When replacing memory ICs, be sure to use ICs written with the initial values of data.**

2. Procedure for replacing memory ICs

PROCEDURE
(1) **Power off** Switch the power off and unplug the power code from the outlet.
(2) **Replace ICs.** Be sure to use memory ICs written with the initial data values.
(3) **Power on** Plug the power code into the outlet and switch the power on.
(4) **Check and set SYSTEM CONSTANT SET:** 1) Press the INFORMATION key and the MUTE key of the REMOTE CONTROL UNIT simultaneously. 2) The SERVICE MENU screen of Fig. 1 will be displayed. 3) While the SERVICE MENU is displayed, press the INFORMATION key and MUTE key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed. 4) Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION -/+ key. 5) Press the MENU key to memorize the setting value. 6) Press the INFORMATION key twice, and return to the normal screen.
(5) **Setting of receive channels** Set the receive channel. For setting, refer to the OPERATING INSTRUCTIONS.
(6) **User settings** Check the user setting values of Table 2, and if setting value is different, set the correct value. For setting, refer to the OPERATING INSTRUCTIONS.
(7) **Setting of SERVICE MENU** Verify the setting items of the **SERVICE MENU** of Table 3, and reset where necessary. For setting, refer to the SERVICE ADJUSTMENTS.

SERVICE MENU



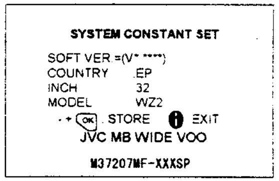
SERVICE MENU

1. IF 2 V/C
3 AUDIO 4 DEF
5 VSM PRESET 6 VPS
7. PIP
8 AUTO PROGRAM (OFF)

1-8 . SELECT ⓘ EXIT

Fig.1

SYSTEM CONSTANT SET



SYSTEM CONSTANT SET

SOFT VER.=(V* ****)
COUNTRY EP
INCH 32
MODEL WZ2
-+ OK . STORE ⓘ EXIT
JVC MB WIDE VOO
M37207MF-XXXSP

Fig.2

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	ⓘ
MUTE	🔇
MENU	OK
FUNCTION UP/DOWN	▲▼
FUNCTION -/+	◀▶

SETTING VALUES OF SYSTEM CONSTANT SET (TABLE 1)

Setting item	Setting content	Setting value			
		AV-32WZ2EN	AV-32WZ2EP	AV-28WZ2EN	AV-28WZ2EP
1. COUNTRY	→ EN → EP → EK —	EN	EP	EN	EP
2. INCH	→ 28 → 32 → 24 —	32	32	28	28
3. MODEL	→ WP2 → WZ2 —	WZ2	WZ2	WZ2	WZ2

USER SETTING VALUES (TABLE 2)

Setting item		Setting value	Setting item		Setting value
SUB POWER		ON	PROLOGIC 3D PHONIC	MODE	CINEMA/SPORT
CHANNEL		1 POSITION		LEVEL	CENTER
CHANNEL PRESET		See;OPERATING INSTRUCTUONS.		TV/SPEAKER	L/R
VOLUME		Appropriate sound volume		VOLUME	MAX
TV / EXT		TV	DOLBY PRO LOGIC	MODE	PHANTON
DISPLAY		CHANNEL DISPLAY		TV SPEAKER	L/R
ZOOM MODE		REGULAR		TEST TONE	OFF
POWER BASS		OFF		VOLUME	MAX
PIP		-----	INSTALL	LANGUAGE	ENGLISH
PICTURE FEATURE	LFR	OFF	EXT SOURCE	EXT SETTING	ID:NO INPUT S-IN:NO INPUT
	VNR	OFF		DUBBING	EXT-1→EXT-2
	4:3 AUTO ASPECT	PANORAMIC	FEATURES	SLEEP TIMER	OFF
	COLOR SYSTEM	TV:depend on PR EXT:AUTO		BLUE BACK	ON
	PIP POSITION	-------		CHILD LOCK	ID NO.0000 all channel off
	MULTI PICTURE	-------	PICTURE SETTING	TINT	COOL
	PICTURE TILT	CENTER		SETTING	RESET
SOUND SETTING	BASS,TRE BALA	CENTER		ECO	OFF
	SPEAKER	ON			
	HEAD PHONE VOLUME	20			
	HEAD PHONE OUTPUT	MAIN			
	HEAD PHONE TV SPEAKER	OFF			
DIGITAL SRROUND		OFF			

SERVICE MENU SETING ITEMS (TABLE 3)

Setting item	Setting value
1. IF	1. VCO 2. DELAY POINT 3. L. V. LEVEL 4. ATT
2. V / C	1. RGB BLK 2. R DRIVE 3. G DRIVE 4. B DRIVE 5. R LEVEL 6. G LEVEL 7. B LEVEL 8. BRIGHT 9. CONT. 10. COLOUR(PAL/SECAM/NTSC) 11. HUE 12. PEAK DRIVE 13. GAMMA 14. VCOF 15. RELC
3. AUDIO/OSD ***(Do not adjust)***	1. CONC LIMIT 2. A2 ID THR 3. JVC LOGO H 4. TEXT MONO H 5. TEXT MIX H

Setting item	Setting value
4. DEF.	1. V-SHIFT 2. V-SLOPE 3. V-SIZE 4. H-CENT 5. H-SIZE 6. EW-PIN 7. EW-COR 8. TRAPEZ 9. V-S.CR 10. EHT-COMP 11. CLAMP
5. VSM PRESET COOL NORMAL WARM	1. BRIGHT 2. CONT. 3. COLOUR 4. SHARP 5. HUE 6. R DRIVE 7. G DRIVE 8. B DRIVE 9. BASS 10. TREBLE
6. VPS ***(Do not adjust)***	VPS
7. PIP (WZ model cannot be adjusted.)	1. MAIN BRIGHT 2. MAIN R-Y 3. MAIN B-Y 4. SUB BRIGHT 5. SUB R-Y 6. SUB B-Y 7. V-CENTER 8. H-CENTER
8. AUTO PROGRAM ***(Do not adjust)***	ON / OFF

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 ways of adjusting this TV: One is with the *REMOTE CONTROL UNIT* and the other is the conventional method using adjustment parts and components.**
2. **The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
3. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before starting adjustment.
4. Make sure that connection is correctly made to AC power source.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
7. Preparation for adjustment (presetting):
   Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT:

(1) PICTURE MODE (VSM)	COOL
(2) SLEEP TIMER	OFF
(3) DIGITAL SURROND	OFF
(4) BALANCE	CENTER
(5) ECO	OFF
(6) ZOOM	REGULAR

MEASUREING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

- Check of B1 voltage.
- Adjustment of FOCUS.
- IF circuit adjustment.
- VSM preset adjust setting.
- VIDEO / CHROMA circuit adjustment.
- DEFLECTION circuit adjustment.
- AUDIO circuit adjustment. (Do not adjust)

BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings (adjustments):

(1) **1. IF** ························ This mode adjusts the setting values of the IF circuit.
(2) **2.V/C** ························ This mode adjusts the setting values of the VIDEO / CHROMA circuit.
(3) **3.AUDIO/OSD** ··············· This mode adjusts the setting values of the multiplicity SOUND circuit.
(4) **4.DEF** ························ This mode adjusts the setting values of the DEFLECTION circuit for each aspect mode given below.

PANORAMIC	(50/60Hz)
REGULAR	(50/60Hz)
14:9 ZOOM	(50/60Hz)
16:9 ZOOM	(50/60Hz)
16:9 ZOOM SUB TITLE	(50/60Hz)
FULL	(50/60Hz)

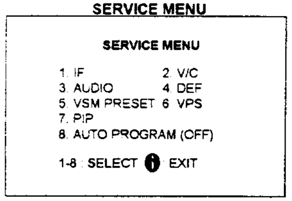
(5) **5.VSM PRSET** ·············· This mode adjusts the initial setting values of COOL,NOMAL and WARM.
(VSM : Video Status Memory)
(6) **6.VPS** ························ This mode shows the monitor of the VPS and PDC.***(Do not adjust).***
(VPS : Video Program System, PDC : Program Delivery Code)
(7) **7.PIP** ························ This mode adjusts the setting values of the PIP circuit.(But WZ model cannot be adjusted.)
(8) **8.AUTO PROGRAM** ········· By turning the power switch on, you can get the state of AUTO PROGRAM. ***(Do not adjust)***

3. BASIC OPERATION OF SERVICE MENU

(1) **How to enter SERVICE MENU**

Press the INFORMATION key and the MUTE key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig. 1 will be displayed.

SERVICE MENU



SERVICE MENU

1. IF 2. V/C
3. AUDIO 4. DEF
5. VSM PRESET 6. VPS
7. PIP
8. AUTO PROGRAM (OFF)

1-8 : SELECT ⓘ EXIT

Fig.1

(2) **Selection of SUB MENU SCREEN**

Press one of keys 1~7 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3), form the SERVICE MENU.

SERVICE MENU → SUB MENU
1. IF
2. V / C
3. AUDIO/OSD
4. DEF.
5. VSM PRESET
6. VPS
7. PIP
8. AUTO PROGRAM

NEME OF REMOTE CONTOROL KEY

Names of key	**key**
INFORMATION	ⓘ
MUTE	🔇
MENU	OK
FUNCTION UP/DOWN	▲ ▼
FUNCTION -/+	◀ ▶

Fig.2

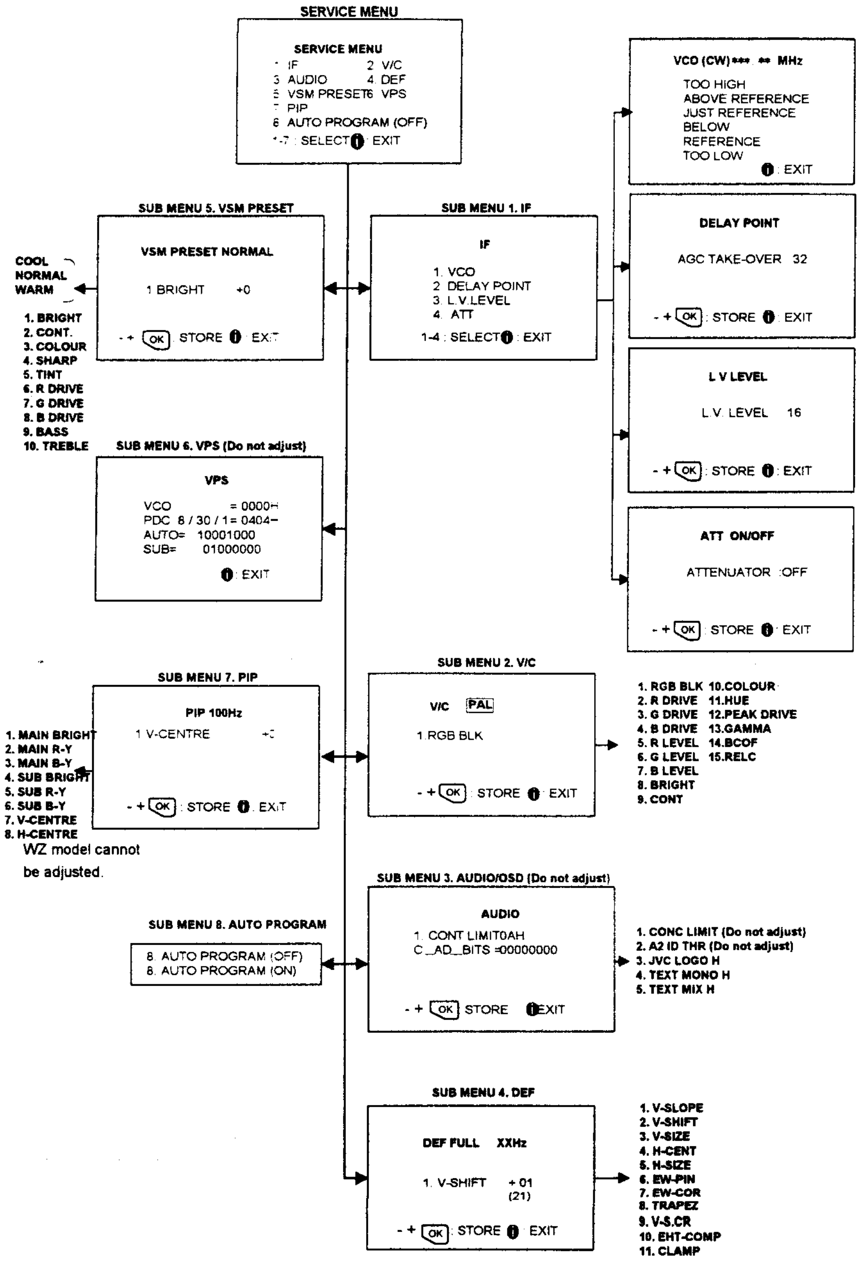

SERVICE MENU
SERVICE MENU
1 IF 2 V/C
3 AUDIO 4 DEF
5 VSM PRESET6 VPS
7 PIP
8 AUTO PROGRAM (OFF)
1-7 : SELECT ⓘ : EXIT
SUB MENU 5. VSM PRESET
VSM PRESET NORMAL
1 BRIGHT +0
- + OK : STORE ⓘ : EXIT
COOL
NORMAL
WARM
1. BRIGHT
2. CONT.
3. COLOUR
4. SHARP
5. TINT
6. R DRIVE
7. G DRIVE
8. B DRIVE
9. BASS
10. TREBLE
SUB MENU 1. IF
IF
1. VCO
2 DELAY POINT
3 L.V.LEVEL
4 ATT
1-4 : SELECT ⓘ : EXIT
VCO (CW)*** ** MHz
TOO HIGH
ABOVE REFERENCE
JUST REFERENCE
BELOW
REFERENCE
TOO LOW
ⓘ : EXIT
DELAY POINT
AGC TAKE-OVER 32
- + OK : STORE ⓘ : EXIT
L V LEVEL
L.V. LEVEL 16
- + OK : STORE ⓘ : EXIT
ATT ON/OFF
ATTENUATOR :OFF
- + OK : STORE ⓘ : EXIT
SUB MENU 6. VPS (Do not adjust)
VPS
VCO = 0000H
PDC 8 / 30 / 1= 0404-
AUTO= 10001000
SUB= 01000000
ⓘ : EXIT
SUB MENU 7. PIP
PIP 100Hz
1 V-CENTRE +0
- + OK : STORE ⓘ : EXIT
1. MAIN BRIGHT
2. MAIN R-Y
3. MAIN B-Y
4. SUB BRIGHT
5. SUB R-Y
6. SUB B-Y
7. V-CENTRE
8. H-CENTRE
WZ model cannot
be adjusted.
SUB MENU 2. V/C
V/C PAL
1 RGB BLK
- + OK : STORE ⓘ : EXIT
1. RGB BLK 10.COLOUR
2. R DRIVE 11.HUE
3. G DRIVE 12.PEAK DRIVE
4. B DRIVE 13.GAMMA
5. R LEVEL 14.BCOF
6. G LEVEL 15.RELC
7. B LEVEL
8. BRIGHT
9. CONT
SUB MENU 8. AUTO PROGRAM
8. AUTO PROGRAM (OFF)
8. AUTO PROGRAM (ON)
SUB MENU 3. AUDIO/OSD (Do not adjust)
AUDIO
1. CONT LIMIT0AH
C_AD_BITS =00000000
- + OK STORE ⓘ EXIT
1. CONC LIMIT (Do not adjust)
2. A2 ID THR (Do not adjust)
3. JVC LOGO H
4. TEXT MONO H
5. TEXT MIX H
SUB MENU 4. DEF
DEF FULL XXHz
1. V-SHIFT + 01
(21)
- + OK : STORE ⓘ : EXIT
1. V-SLOPE
2. V-SHIFT
3. V-SIZE
4. H-CENT
5. H-SIZE
6. EW-PIN
7. EW-COR
8. TRAPEZ
9. V-S.CR
10. EHT-COMP
11. CLAMP

Fig. 3 SUB MENU SCREEN

(3) Method of Setting

1) Method of Setting 1.IF

[1. VCO]

① 1 Key ························ Select 1.IF.

② 1 Key ························ Select 1.VCO

③ The VCO (CW) screen will be displayed in yellow when the AFC voltage is at a certain level and in blue when it is at other levels.

④ INFORMATION Key ··········· As you press this twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ························ Select **1.IF**.

② 2 Key ························ Select 2.DELAY POINT.

③ FUNCTION -/+ ················ Set (adjust) the setting values of the setting items.

④ MENU Key ···················· Memorize the set value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)

⑤ INFORMATION Key ··········· When this is pressed twice, you will return to the SERVICE MENU.

2) Method of setting **2.V/C, 3.AUDIO, 4.DEF, 5.VSM PRESET** and **7.PIP.**

① 2~5 ,7 Key ··················· Select one from **2. V/C, 3. AUDIO, 4. DEF, 5. VSM PRESET** and **7.PIP**.

② FUNCTION UP/DOUN Key ······ Select setting items.

③ FUNCTION -/+ ················ Set (adjust) the setting values of the setting items.
(When 1.RGB BLK of 2.V/C is selected, press the FUNCTION-/+ key, and the whole will change to a black picture. Press the 2 key, and the screen will return to the original screen.)

④ MENU Key ···················· Memorize the setting value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key - if you do, the values will not be stored in memory.)

⑤ INFOMATION Key ·············· Return to the **SERVICE MENU** screen.

3) Method of setting **6.VPS** and **8.AUTO PROGRAM**.

6.VPS ·························	This mode displayed monitor of VPS systems. **Do not adjust**
8.AUTO PROGRAM ···············	When the MAIN POWER is turned on with the state of AUTO PROGRAM ON, you get a mode that initializes every existing set value including language selection. Because this mode is set at the factory upon completion of the adjustment, you need not to use it for service. **Do not adjust in this mode.**

(4) Release of SERVICE MENU

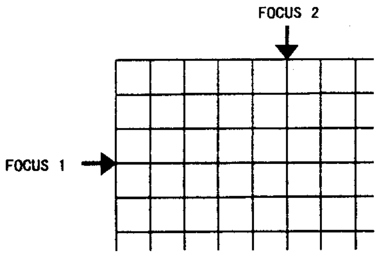
1) After completing the setting, return to the SERVICE MENU, then again press the INFORMATION key.

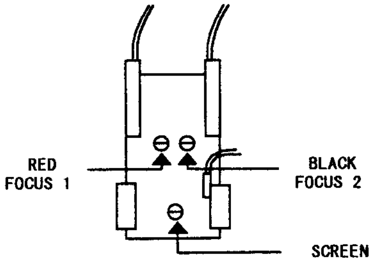
POWER SUPPLY CHECK

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 voltage	**Signal generator** **DC voltmeter**	**TP-91(B1)** **TP-E** **[X connector in POWER DEF PWB]**		1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E. 3. Make sure that the voltage is DC141.4±2.0V.

FOCUS ADJUSTMENT

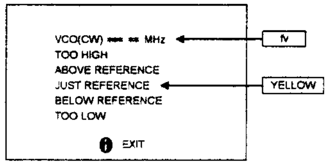
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	**Signal generator**		**FOCUS VR** **[In HVT]**	[32 model] 1. By turning the black VR FOCUS 2, adjust the picture so that the 5th vertical line from the left side of the cross-hatch picture becomes thinnest. 2. By turning the red VR FOCUS 1, adjust the picture so that the 3rd horizontal line from the upper side of the cross-hatch picture becomes uniform at the line center and its periphery. 3. Carry out adjustment by repeating the steps 2 and 3 above. 4. Make sure that when the screen is darkened, the lines remain in good focus. [28 model] 1. Receive a cross-hatch signal. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.





IF CIRCUIT ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VCO (MAIN)	**Remote control unit**		**P. CW TRANSF. (T050)** **P.L-VL CW TRIM C (C052)** **[In IF PWB]**	● ***Do not make any adjustment unless the adjustment is out of*** **way and you cannot get correct PICTURE.** 1. Select 1.IF from the SERVICE MENU. 2. Press 1 key and select 1.VCO. 3. Select a receivable broadcast channel with the CHANNEL key. 4. Turn the core of P. CW TRANSF. until the colour of the characters TOO HIGH displayed on the screen changes from blue to **Yellow**. (Step 1) 5. Turn the core of P. CW TRANSF. until the colour of the characters TOO LOW changes from blue to **Yellow**. (Step 2) 6. Then slowly turn back the core of P. CW TRANSF. until the colour of the characters JUST REFFERENCE changes from blue to **Yellow**. (Step 3) 7. In the district SECAM L broadcast channel with the CHANNEL key and adjust the P.L-VL CW TRIM. C in same manner as for above step. And necessary, readjust P. CW. TRANSF. 8. Press the INFORMATION key three times to return to normal screen. 9. Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.
Adjustment of DELAY POINT	**Remote control unit**		**DELAY POINT (AGC TAKE-OVER)**	1. Receive a black and white signal (colour off). 2. Select 1.IF from the SERVICE MENU. 3. Select 2.DELAY POINT by pressing the 2 key on the remote control. 4. Adjust the FUNCTION - or + key until video noise disappears. 5. Press the MENU key and memorize the set value. 6. Turn to other channels and make sure that there are no irregularities.
Adjustment of L,V LEVEL **(EP MODEL ONLY)**	**Remote control unit** **Oscilloscope**		**L, V LEVEL**	1. Receive a color bar signal. (SECAM-L,75% white) 2. Connect the oscilloscope to EXT-1 PIN 19. 3. Select 1.IF from the service Menu. 4. Select 3.L.V LEVEL by pressing the 3 key on the remote control. 5. Turn to other channels and make sure that there are no irregularities.



Screen display	Step 1	→ 2	→ 3
TOO HIGH	Yellow	→ Blue	→ Blue
ABOVE REFERENCE	Blue	→ Blue	→ Blue
JUST REFERENCE	Blue	→ Blue	→ Yellow
BELOW REFERENCE	Blue	→ Blue	→ Blue
TOO LOW	Blue	→ Yellow	→ Blue

Setting item (Adjustment item)	Variable range	Initial setting value
DELAY POINT (AGC TAKE-OVER)	0~63	30

VSM PRESET SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET ADJUST	**Remote control unit**		**1. BRIGHT** **2. CONT.** **3. COLOUR** **4. SHARP** **5. HUE** **6. R DRIVE** **7. G DRIVE** **8. B DRIVE** **9. BASS** **10. TREBLE**	1. Select COOL with the MENU key of the remote control unit. 2. Select 5.VSM PRESET from the SERVICE MENU. 3. Adjust the FUNCTION UP/DOWN and -/+ key to bring the set values of 1.BRIGHT ~ 10.TREBLE to the values shown in the table. 4. Press the MENU key and memorize the set value. 5. Respectively select the VSM PRESET mode for REGULAR and WARM, and make similar adjustment as in 3 above. 6. Press the MENU key and memorize the set value. * Refer to OPERATING INSTRUCTIONS for the PICTURE MODE.

Setting item \ VSM preset mode	COOL	REGULAR	WARM
1. BRIGHT SETTING VALUE	+0	+0	+0
2. CONT. SETTING VALUE	+13	+10	+2
3. COLOUR SETTING VALUE	+2	+0	-2
4. SHARP SETTING VALUE	+0	+0	-2
5. HUE SETTING VALUE	+0	+0	+0
6. R DRIVE SETTING VALUE	-5	+0	+14
7. G DRIVE SETTING VALUE	+11	+0	+15
8. B DRIVE SETTING VALUE	+0	+0	-6
9. BASS SETTING VALUE	+0	+0	0
10.TREBLE SETTING VALUE	+0	+0	0

SETTING VALUES OF VSM PRESET

VIDEO/CHROMA CIRCUIT ADJUSTMENT

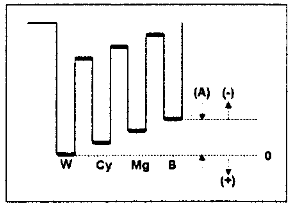
**The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**

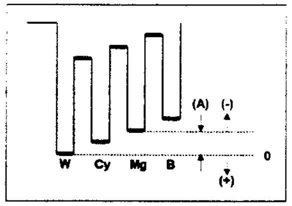
Setting Item (Adjustment Item)	Initial setting value
1.RGB BLK	———
2.R.DRIVE	+12
3.G.DRIVE	+2
4.B.DRIVE	+0
5.R.LEVEL	+0
6.G.LEVEL	+0
7.B.LEVEL	+0
8.BRIGHT	-10
9.CONTRAST	-5

Setting item \ Colour system	Initial setting value	
	PAL/ SECAM	NTSC 3.58 NTSC 4.43
10.COLOUR	-4/0	0
11.HUE	———	0
12.PEAK DRIVE	+5	———
13.GAMMA	-21	———
14.VCOF	+0	———
15.RELC	+0	———

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE	**Signal generator** **Remote control unit**		**2.R DRIVE** **3.G RIVE** **5.R LEVEL** **6.G LEVEL** **7.B LEVEL**	● Set the PICTURE MODE to COOL. 1. Receive a black and white signal(colour off). 2. Select 2. V/C from the SERVICE MENU. 3. Modify 2. R DRIVE and 3.G DRIVE data to adjust the white balance (high light) 4. Modify 5. R LEVEL, 6. G LEVEL and 7. B LEVEL data to adjust the white balance of low light. Components. 5. Press the MENU key and memorize the set value.
Adjustment of SUB BRIGHT	**Remote control unit**		**8.BRIGHT**	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 8.BRIGHT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION -/+ key. 5. If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness. 6. Press the MENU key and memorize the set value.
Adjustment of SUB CONT.	**Remote control unit**		**9.CONT.**	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 9.CONT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION - or + key. 5. If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast. 6. Press the MENU key and memorize the set value.

Item	Measuring *instrument*	Test point	Adjustment part	Description
Adjustment of SUB COLOUR I	**Remote control unit**		**10.COLOUR (PAL~NTSC)**	**[Method of adjustment without using measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive PAL broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 10.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the MENU key and memorize the set value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM broadcast. Make fine adjustment of SECAM COLOUR in the same manner as for above.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. 2. Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR II	**Signal generator ⏚** **Oscilloscope** **Remote control unit**	**TP-47B** **TP-E( )** **[CRT SOCKET PWB]**	**10.COLOUR (PAL~NTSC)**	**[Method of adjustment using measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive a PAL full field colour bar signal(75% white). 2. Select 2.V/C from the SERVICE MENU. 3. Select 5.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value of PAL COLOUR with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust PAL COLOUR and bring the value of (A) in the illustration to 8V (voltage difference between white (w) and blue (B)). 7. Press the MENU key and memorize the setting value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM full field colour bar signal(75% white). 2. Set the initial setting value of SECAM COLOUR with the FUNCTION -/+ key. 3. Adjust SECAM COLOUR and bring the value of (A) of the illustration to 6V. 4. Press the MENU key and memorize the setting value.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION -/+ key. 3. Adjust NTSC 3.58 COLOUR and bring the value of (A) of the illustration to 2V(W~B). 4. Press the MENU key and memorize the setting value.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB TINT Ⅰ	**Remote control unit**		**11.HUE**	**[Method of adjustment without using measuring instrument]**
			NTSC 3.58 TINT	[NTSC 3.58 TINT] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 TINT with the FUNCTION -/+ key. 5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint. 6. Press the MENU key and memorize the set value.
			NTSC 4.43 TINT	[NTSC 4.43 TINT] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of SUB TINT Ⅱ	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B** **TP-E** **[CRT SOCKET PWB]**	**11.HUE**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 TINT	[NTSC 3.58 TINT] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 TINT with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust NTSC 3.58 TINT to bring the value of (A) in the illustration to 0V (voltage difference between white (W) and magenta(Mg)). 7. Press the MENU key and memorize the setting value
			NTSC 4.43 TINT	[NTSC 4.43 TINT] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

DEFLECTION CIRCUIT ADJUSTMENT

There are 3 modes of the adjustment (1) 50Hz mode (①PANORAMIC ②FULL ③SUBTITLE), (2) 60Hz mode (each aspect mode) ······ depending upon the kind of signals (vertical frequency 50Hz / 60Hz).

- **When the 50Hz PANORAMIC mode has been established, the setting of other modes will be done automatically. However, if the picture quality has not been optimized, adjust each mode again, respectively.**
- **The adjustment using the remote control unit is made on the basis of the initial setting values.**
- **The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
- **Regular and Zoom switching is conducted not by the Deflection circuit, but by the 100 Hz PWB. Therefore, the deflection system cannot be adjusted in these modes.**

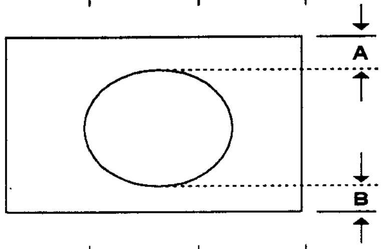
[32 model]

Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		SUBTITLE	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
1.V- SHIFT	Vertical center	3	0	0	0	0	0
2.V- SLOPE	Vertical def. Start position	14	-7	2	-9	0	2
3.V-SIZE	Vertical height	33	2	-1	-1	20	-1
4.H-CENT	Horizontal center	23	-3	0	-1	0	-2
5.H-SIZE	Horizontal width	23	-1	8	-1	-1	0
6.EW-PIN	Side pin correction	42	0	-3	0	3	0
7.EW-COR	Side pin four corner correction	36	0	-10	-8	-7	0
8.TRAPEZ	Trapezoidal distortion correction	3	0	-1	-1	0	1
9.V-S.CR	Vertical height correction	8	0	12	0	5	0
10.EHT-COMP	Size Regulation	30	0	0	0	0	0
11.CLAMP	CLAMP Position	0	0	0	0	0	0

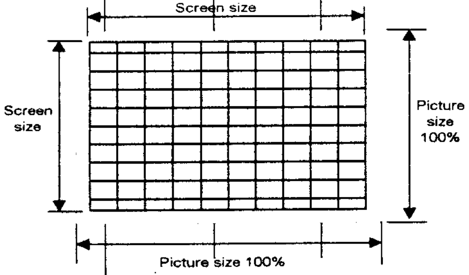
[28 model]

Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		SUBTITLE	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
1.V- SHIFT	Vertical center	3	0	0	0	3	0
2.V- SLOPE	Vertical def. Start position	14	-7	2	-9	0	2
3.V-SIZE	Vertical height	35	2	3	0	14	5
4.H-CENT	Horizontal center	25	-3	0	-3	0	-3
5.H-SIZE	Horizontal width	29	-1	7	-1	0	-1
6.EW-PIN	Side pin correction	30	-1	4	3	9	2
7.EW-COR	Side pin four corner correction	10	-3	18	6	10	3
8.TRAPEZ	Trapezoidal distortion correction	3	1	0	0	0	0
9.V-S.CR	Vertical height correction	8	0	12	0	5	0
10.EHT-COMP	Size Regulation	25	0	0	0	0	0
11.CLAMP	CLAMP Position	0	0	0	0	0	0

Item	Measuring instrument	Test point	Adjustment part	Description
***Adjustment* of V-SHIFT and V-SLOPE**	***Signal* generator** **Remote**		***1.V- SHIFT***	[FULL *mode*] 1. Receive a circle pattern signal of vertical frequency 50Hz. 2. Select 4.DEF from the SERVICE MENU. 3. Select 1.V-SHIFT with the FUNCTION UP/DOWN key. 4. Adjust V-SHIFT to make **A = B**. 5. IF it is not enough to adjust the "V=SHIFT", choose "2.V=SLOPE" and adjust to make **A = B**. 6. Press the MENU key and memorize the set value.



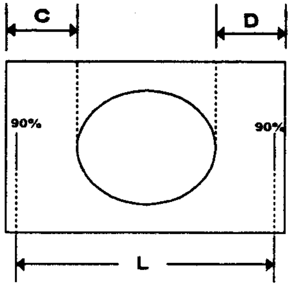
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V-SIZE			**3.V. SIZE**	7. Receive a cross-hatch signal. 8. Select 3.V-SIZE and set the initial setting value. 9. Adjust V-SIZE and make sure that the vertical screen size of the picture size is in the bellow table. 10. Press the MENU key and memorize the set value. 11. Input a NTSC VIDEO signal from the EXT terminal, and make sure that the vertical screen size of the RANORAMIC mode is in the table below. 12. Press the MENU key and memorize the set value.



MODE	FULL	PANORAMIC	16:9 ZOOM SUB TITLE
SCREEN TOP	92%	87%	70%
SCREEN BOTTOM	92%	87%	83%

[SCREEN SIZE]

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of H.CENTER			**4.H-CENT.**	13. Receive a circle pattern signal. 14. Select 4.H-CENT and set the initial setting value 15. Adjust H-*CENT to make C=D*. 16. Press the MENU key and memorize the set value.

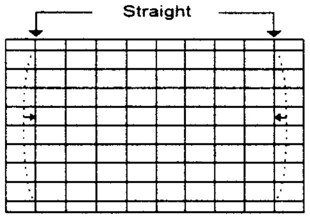


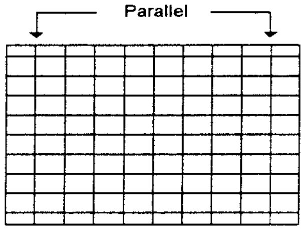
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of H.SIZE			**5.H-SIZE**	17. Receive a cross-hatch signal. 18. Select 5.H-SIZE and set the initial setting value. 19. Adjust H-SIZE and make sure that the horizontal screen size of the picture size is in the bellow table. 20. Press the MENU key and memorize the set value. 21. Input a NTSC VIDEO signal from the EXT terminal, and make sure that the horizoutal screen size of the PANORAMIC mode is in the table below. 22. Press the MENU key and memorize the set value.

ASPECT MODE	FULL	PANORAMIC	16:9 ZOOM SUB TITLE
H SIZE	92%	95%	92%

[SCREEN SIZE]

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of EW-PIN			**6.EW-PIN**	23. Select 6.EW-PIN and set the initial setting value 24. Adjust EW-PIN and make the 2nd.vertical lines at the left and right edges of the screen straight. Also make sure that the 3rd vertical lines are straight. 25. Press the MENU key and memorize the set value.



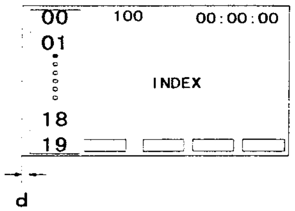
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of EW-COR			**7.EW-COR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 26. Select 7.EW-COR and set the initial setting value. 27. Adjust EW-COR and make the vertical lines at the four corners of the screen straight. 28. Press the MENU key and memorize the set value.
Adjustment of TRAPEZ			**8.TRAPEZ**	[50Hz PANORAMIC mode] 29. Receive a cross-hatch signal of vertical frequency 50Hz. 30. Select 4.DEF from the SERVICE MENU. 31. Select 8.TRAPEZ with the FUNCTION UP/DOWN key. 32. Set the initial setting value of TRAPEZ with the FUNCTION - or + key. 33. Adjust TRAPEZ and bring the VERTICAL lines at the right and left edges of the screen parallel . 34. Press the MENU key and memorize the set value.
Adjustment of V-S.CR			**9.V-S.CR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 35. Select 9.V-S.CR and set the initial setting value. 36. Adjust each item to get exact square of cross-hatch pattern. 37. Press the MENU key and memorize the set value.
				At first the adjustment in 50Hz-PANORAMIC mode should be done, then the data for the other zoom mode is corrected in the respective value at the same time. And confirm the deflection adjustment initial setting value in 60Hz(NTSC EXT mode) PANORAMIC mode. If the adjustment in 50Hz each zoom mode has been done and stored, the data for the same aspect modes in 60Hz is corrected in the respective value. Only the data for the other aspect mode in 60Hz is corrected for itself.

AUDIO CIRCUIT ADJUSTMENT

3. AUDIO / OSD

Setting item	Variable range	fixed value
1. CONC LIMIT***(Do not adjust)***	00H~FFH	0AH
2. A2 ID THR***(Do not adjust)***	00H~FFH	19H

OSD horizontal position

Item	Test point	Adjustment part	Description
JVC LOGO H		3.JVC LOGO H	1. Select 3.AUDIO / OSD from SERVICE MENU. 2. Select 3.JVC LOGO H with the FUNCTION -/+ key. 3. Confirm that JVC LOGO H=00H 4. Press the MENU Key, and memorize the set values.
TEXT MONO H		4.TEXT MONO H	1. Select 3.AUDIO / OSD from SERVICE MENU. 2. Select 4.TEXT MONO H with the FUNCTION -/+ key. 3. Push text key to get a picture of "TEXT-MONO H". 4. Push "SUBPAGE" key. It gets a picture as shown left. 5. Adjust the value of the distance "d" as shown left with the FUNCTION UP/DOWN key. Push "SUBPAGE" key to check adjustment every adjust. 6. Press the MENU Key, and memorize the set values.

MODEL	d
ALL MODELS	5~20mm

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns *will not be supplied* .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .
- As a rule, the resistors and capacitors which are indicated as shown in "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board .
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" .

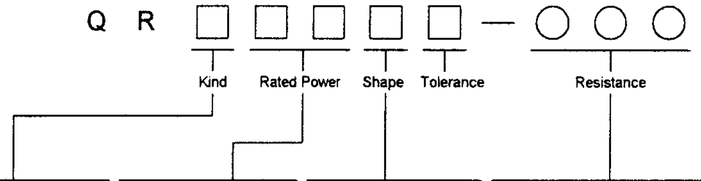
ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	± 10%	± 20%	± 30%	+ 30% - 10%	+ 50% - 10%	+ 80% - 20%	+ 100% - 0%

HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



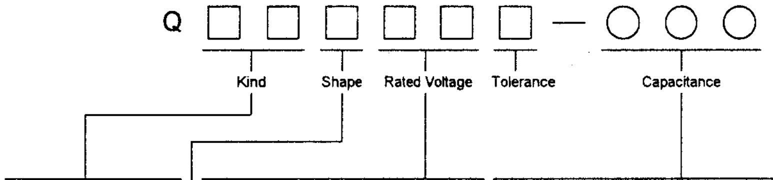
Symbol	Part Name
C	COMP.R
D	C R

Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

Symbol	Shape
1	Straight lead

Indicate with first two-figure expressed by Ω and following 0.
Please note that,in case of resistance less than 10 Ω, a letter "R" will be effective as point.
EX.
2.2 Ω = 2R2
470 Ω = 47×10^1 → 471
150kΩ = 15×10^4 → 154

■ CAPACITOR



Symbol	Part Name
CS	C CAP.
ET	E CAP.
FM	M CAP.

5 Figure / 6 Figure	0	1	2
A		10V	100V
C		16V	160V
D			200V
E		25V	250V
H		50V	500V
J	6.3V	63V	
V		35V	

Indicate with first two-figure expressed by pF and following 0.
Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.
EX.
5pF = 5R0
1000pF = 10×10^2 → 102
47μF = 47×10^6 → 476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
A	Leads in the same direction (compact part)

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- CRT SOCKET PW BOARD ASS'Y (SMB-3002B-U2) ······ 46
- AUDIO PW BOARD ASS'Y (SMB-6001B-U2) ······ 47
- FRONT CONTROL PW BOARD ASS'Y (SMB-8002B-U2) ······ 47
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- AUDIO PW BOARD ASS'Y (SMB-6001B-U2) ······ 63
- FRONT CONTROL PW BOARD ASS'Y (SMB-8002B-U2) ······ 63
- DOLBY PW BOARD ASS'Y (SMB0D002B-U2) ······ 64
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USING P.W. BOARD & REMOTE CONTROL UNIT

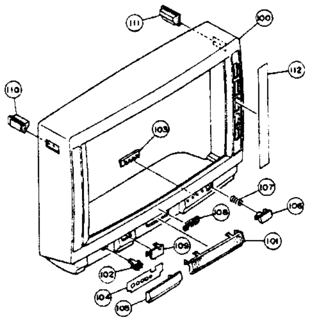
Model / P.W.B ASS'Y	AV-28WZ2EN(A) AV-28WZ2EP(A)	AV-32WZ2EN(A) AV-32WZ2EP(A)
MAIN P.W.B	SMB-1002B-U2	SMB-1003B-U2
POWER DEF P.W.B	SMB-2002B-U2	SMB-2003B-U2
CRT SOCKET P.W.B	SMB-3002B-U2	SMB-3001B-U2
AUDIO P.W.B	SMB-6001B-U2	←
FRONT CONTROL UNIT	SMB-8002B-U2	←
SUB TEXT P.W.B	SMB-1111B-U2	←
DOLBY P.W.B	SMB0D002B-U2	←
100Hz P.W.B	SMB0Z002B-U2	←
AV TERMINAL P.W.B	SMB0J001B-U2	←
IF P.W.B	SMB0F701B-U2	←
AUTO ASPECT MODULE P.W.B	SJF0W001A(U)	←
REMOTE CONTROL UNIT	RM-C793-1E	←

EXPLODED VIEW PARTS LIST

[AV-28WZ2EN(A)/AV-28WZ2EP(A)]

⚠ Ref. No.	Part No.	Part Name	Description	Local
⚠ V01	W66ESF002X44	ITC TUBE(C)		
⚠ L01	CELD061-001J2	DEGAUSSING COIL		*
⚠ T2551	CETH020-00AJ1	HVT(SERVICE)		*
1	CHGB0029-0B	BRAIDED ASSY		*
2	CHGB0017-0B	BRAIDED SUB ASSY	×2	*
3	CM36311-001	KNOB CAP		
4	CM12925-003-E	CONTROL BASE		*
5	CM12925-004-E	CONTROL BASE		*
6	CM12923-A01-E	CHASSIS BASE		*
7	CM12924-C02-E	AV TERMINAL BASE		*
8	SBSB3012M	TAPPING SCREW	×7	*
11	CHFB125-06BD	FFC WIRE		*
12	CHGY0017-0A-YS	ANTENNA CABLE		*
⚠ 13	CE41950-001J1	ANODE CABLE ASSY		*
⚠ 14	AEEMP001-185	POWER CORD		*
⚠ 15	CM46618-A01-E	POWER CORD CLAMP		*
16	CHGS0075-AB	S.P WIRE ASSY		*
17	CE42112-002	PALJ CONNECTOR		
18	CEBSF10P-05KJ6	SPEAKER	×2 SP01/02	*
21	2528MXSP-SZE-E	DOME SPEAKER	×2	*
22	CM12921-001-E	DOME ADAPTER	×2	*
23	CM12922-001-E	DOME BOX	×2	*
⚠ 24	CM12582-A04-E	REAR COVER		*
25	GBSA4016N	TAPPING SCREW	×13	*
⚠ 26	LC20093-003A-U	RATING LABEL	AV-28WZ2EN(A)ONLY	*
⚠ 27	LC20092-003A-U	RATING LABEL	AV-28WZ2EN(A)	*
⚠ 27	LC20094-003A-U	RATING LABEL	AV-28WZ2EP(A)	*
28	QQR0778-001	CORE FILTER		
29	QQR0490-001	NOISE FILTER	×2	
30	CE41355-00B	CORE ASSY	×4	
31	QQR0804-001	CORE FILTER		
100	CM12833-A0B-E	FRONT CABINET AS	Include NO.101~112	*
101	CM12966-001-E	CENTER PANEL		*
102	CM48229-00A	DOOR LATCH		*
103	CM36223-002-H	L.E.D.LENS		*
104	CM36587-002	OPERATION SHEET		*
105	CM23132-001	DOOR		*
106	CM36225-010	POWER KNOB	SERVICE	*
107	CM35235-003-H	SPRING		*
108	CM48125-001	JVC MARK		*
109	CM48076-002-H	C.D.S.WINDOW		*
110	CM35865-00U	INSULATER ASSY	SERVICE	*
111	CM35865-00V	INSULATOR ASSY R	SERVICE	*
112	CM36171-00A-H	SPEAKER NET	×2	*

EXPLODED VIEW LIST

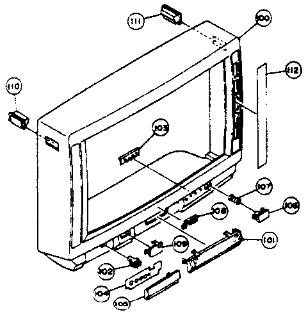


EXPLODED VIEW LIST

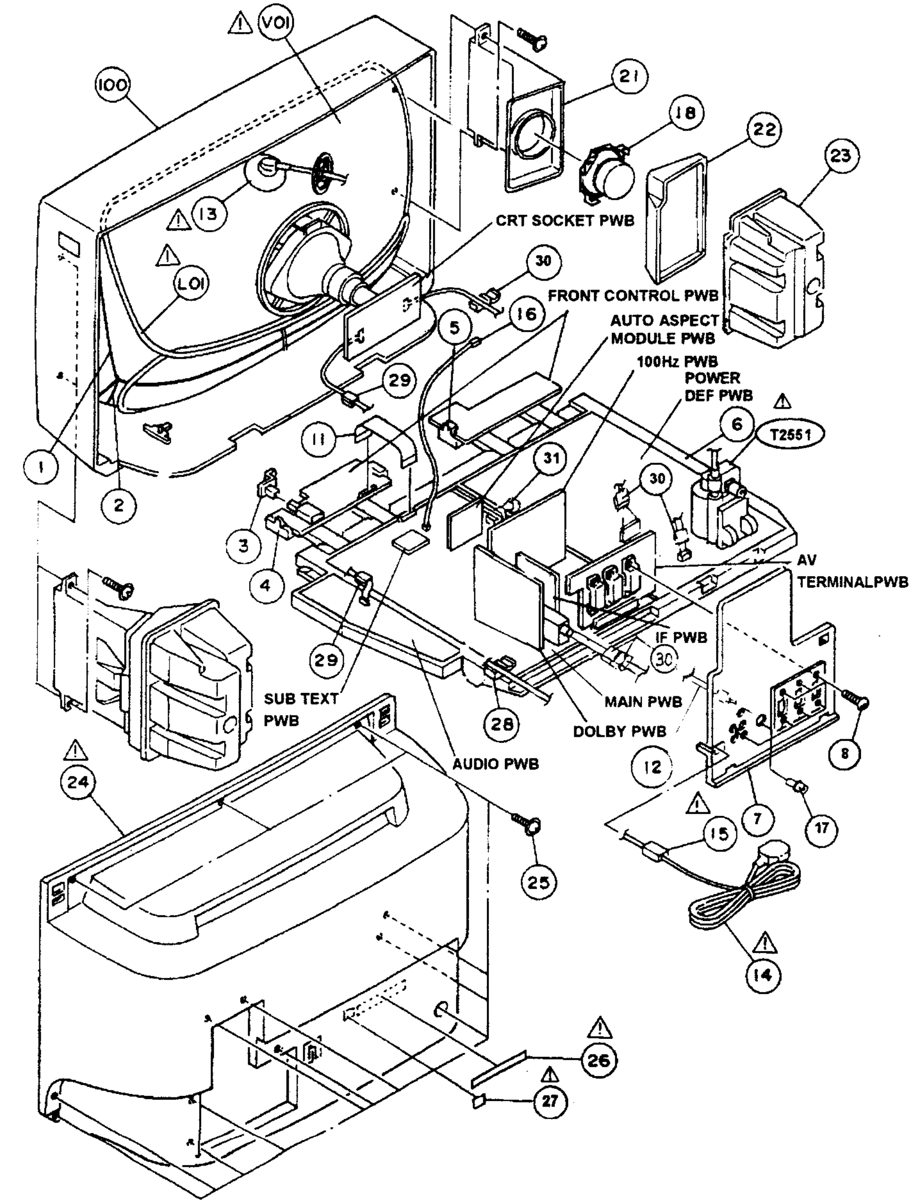
[AV-32WZ2EN(A)/AV-32WZ2EP(A)]

⚠ Ref. No.	Part No.	Part Name	Description	Local
⚠ V01	W76ESF031X44	ITC TUBE(C)		*
⚠ L01	CELD062-001J2	DEGAUSSING COIL		*
L03	CELD904-001	ROTATION COIL		*
⚠ T2551	CETH021-00AJ1	HVT(SERVICE)		-
1	CHGB0029-0C	BRAIDED ASSY		*
2	CHGB0017-0B	BRAIDED SUB ASSY	×2	*
3	CM36311-001	KNOB CAP		
4	CM12925-001-E	CONTROL BASE		*
5	CM12925-002-E	CONTROL BASE		*
6	CM12923-A01-E	CHASSIS BASE		*
7	CM12924-C02-E	AV TERMINAL BASE		*
8	SBSB3012M	TAPPING SCREW	×7	*
9	CM23076-B01-E	TRANSF.HOLDER		*
10	GBSA4016N	TAPPING SCREW	×3	*
11	CHFB125-12BD	FFC WIRE		*
12	CHGY0017-0A-YS	ANTENNA CABLE		*
⚠ 13	CE41950-001J1	ANODE CABLE ASSY		*
⚠ 14	AEEMP001-185	POWER CORD		*
⚠ 15	CM46618-A01-E	POWER CORD CLAMP		*
16	CHGS0075-AA	S.P WIRE ASSY		*
17	CE42112-002	PALJ CONNECTOR		
18	CEBSF10P-05KJ6	SPEAKER	×2 SP01/02	*
21	2528MXSP-SZE-E	DOME SPEAKER	×2	*
22	CM12921-001-E	DOME ADAPTER	×2	*
23	CM12922-001-E	DOME BOX	×2	*
⚠ 24	CM12737-003-E	REAR COVER		*
25	GBSA4016N	TAPPING SCREW	×13	*
⚠ 26	LC20093-002A-U	RATING LABEL	AV-32WZ2EN(A) ONLY	*
⚠ 27	LC20092-002A-U	RATING LABEL	AV-32WZ2EN(A)	*
⚠ 27	LC20094-002A-U	RATING LABEL	AV-32WZ2EP(A)	*
28	QQR0778-001	CORE FILTER		
29	QQR0490-001	NOISE FILTER	×2	
30	CE41355-00B	CORE ASSY	×5	
31	QQR0804-001	CORE FILTER		
100	CM12587-A0Q-E	FRONT CABINET AS	Include NO.101~112	*
101	CM12966-001-E	CENTER PANEL		*
102	CM48229-00A	DOOR LATCH		*
103	CM36223-002-H	L.E.D.LENS		*
104	CM36857-001	OPERATION SHEET		*
105	CM23131-A01	DOOR		*
106	CM36225-010	POWER KNOB	SERVICE	*
107	CM35235-003-H	SPRING		*
108	CM48125-001	JVC MARK		*
109	CM48076-002-H	C.D.S.WINDOW		*
110	CM35865-00U	INSULATER ASSY	SERVICE	*
111	CM35865-00V	INSULATOR ASSY	SERVICE	*
112	CM36172-00A-S	SPEAKER NET	×2	*

EXPLODED VIEW



EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST [AV-28WZ2EN(A)/AV-28WZ2EP(A)]

MAIN PW BOARD ASS'Y (SMB-1002B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRD12CJ-474SX	C R	470kΩ 1/2W J	*
R1206	QRG019J-101S	OM R	100 Ω 1W J	*
R1229	QRD123J-181SX	C R	180 Ω 1/2W J	*
R1231	QRG019J-101S	OM R	100 Ω 1W J	*
R1748	QRB069J-103	NET. R		*
CAPACITOR				
C1001	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1002	QETC1HM-107Z	E CAP.	100μF 50V M	*
C1003	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1004	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1005	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1006	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1008	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1011	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1012	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1201	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1203-04	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1205-06	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1207	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1209	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1210	QETN1CM-477Z	E CAP.	470μF 16V M	*
C1212-13	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1214-15	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1216-17	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1218-19	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1220	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1221-22	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1223-24	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1231-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1301	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1302	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1304	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1305	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1306	QFLC1HJ-223MZ	M CAP.	0.022μF 50V J	*
C1307-08	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1311-13	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1315	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J	*
C1316	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1317	QFV71HJ-154MZ	TF CAP.	0.15μF 50V J	*
C1318	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1320	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1321-22	QCT25CH-120Z	C CAP.	12pF 50V J	*
C1323	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1325-26	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1327	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1328-32	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1335	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C1341	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
C1348	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1350-52	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1353-55	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	*
C1357	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1358	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1359	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1360	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1363	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1365	QEZ0106-228R	E CAP.	2200μH 10V M	
C1375	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1610-11	QCT25CH-2R0Z	C CAP.	2pF 50V J	*
C1612	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1615	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1616	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1617	QETN1HM-105Z	E CAP.	1μF 50V M	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1623-24	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C1625	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1626	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1627	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C1629-30	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C1631	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1632	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1633	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1645	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1646	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1647	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1649	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1660	QFLC1HJ-333MZ	M CAP.	0.033 μF 50V J	*
C1703	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1704	QETN1AM-107Z	E CAP.	100 μF 10V M	*
C1705-06	QCT25CH-3R0Z	C CAP.	3 pF 50V J	*
C1707	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1708	QFLC1HJ-333MZ	M CAP.	0.033 μF 50V J	*
C1709	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1710	QETN1EM-476Z	E CAP.	47 μF 25V M	*
C1711	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1712	QFLC1HJ-333MZ	M CAP.	0.033 μF 50V J	*
C1713	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1714	QETN1HM-474Z	E CAP.	0.47 μF 50V M	*
C1715	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C1716	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1717	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C1751	QFLC1HJ-563MZ	M CAP.	0.056 μF 50V J	*
C1752	QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	*
C1754	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1756-57	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1758	QETN1AM-227Z	E CAP.	220 μF 10V M	*
C1759	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1760-61	QCT25CH-150Z	C CAP.	15 pF 50V J	*
C1762	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1763	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C1764	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1766-68	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1769-71	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C1772	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C1773	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C1776	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1780	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V J	*
C1781	QCZ0120-104MZ	C CAP.	0.1 μF 25V Z	*
C1782	QFLC1HJ-223MZ	M CAP.	0.022 μF 50V J	*
C1801	QETN1EM-107Z	E CAP.	100 μF 25V M	*
COIL				
L1001-02	CELP026-8R2Z	PEAKING COIL	8.2 μH	*
L1003	CELP026-221Z	PEAKING COIL	220 μH	*
L1601	CELP027-220Z	PEAKING COIL	22 μH	*
L1602	CELP027-180Z	PEAKING COIL	18 μH	*
L1611-12	CELC005-2R5J7	CHOKE COIL	2.5 μH	*
L1701	CELP026-4R7Z	PEAKING COIL	4.7 μH	*
L1702	CELP026-8R2Z	PEAKING COIL	8.2 μH	*
L1753	CELP026-4R7Z	PEAKING COIL	4.7 μH	*
DIODE				
D1201-11	MTZJ13(B)-T2	ZENER DIODE		*
D1212-13	1SS133-T2	SI.DIODE		*
D1214-15	MTZJ13(B)-T2	ZENER DIODE		*
D1343	1SS133-T2	SI.DIODE		*
D1345-48	1SS133-T2	SI.DIODE		*
D1349	MTZJ6.2(B)-T2	ZENER DIODE		*
D1350-53	1SS133-T2	SI.DIODE		*
D1356	1SS146-T2	SI.DIODE		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
DIODE				
D1357	1SS133-T2	SI.DIODE		*
D1358	1SS133-T2	SI.DIODE		
D1701-02	1SS133-T2	SI.DIODE		*
D1704	1SS146-T2	SI.DIODE		*
D1705	1SS133-T2	SI.DIODE		*
D1710-11	1SS133-T2	SI.DIODE		*
D1751-53	1SS133-T2	SI.DIODE		*
D1754-58	MTZJ6.2(B)-T2	ZENER DIODE		*
D1801-02	1SS133-T2	SI.DIODE		*
D1803	MTZJ6.8(A)-T2	ZENER DIODE		*
D1804	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q1201-05	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
Q1208	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1209	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1211-12	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1213-14	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
Q1217	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1301	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1302	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1303-04	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1342	DTC144ES-T	DIGI.TRANSISTOR		*
Q1343-44	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
Q1346	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1349	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1610	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
Q1613	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1701-04	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1752	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1753	DTC124ES-T	DIGI.TRANSISTOR		*
Q1801	2PA1015(YG)-T	SI.TRANSISTOR		*
IC				
IC1301	CXA1545AS	I.C(MONO-ANA)		
IC1303	TDA9143	I C		
IC1304	TDA4665	I.C(MONO-ANA)		*
IC1305	TDA4780	I.C(MONO-ANA)		
IC1311	AN77L05-Y	I.C(MONO-ANA)		*
IC1601	MSP3410B-PP-F7	I.C(DIGI-OTHER)		*
IC1701	M37207EFSP	I C		
IC1702	L78LR05E-MA	I.C(MONO-ANA)		*
IC1703	AT24C16-32WP2	I.C(EP-ROM)		*
IC1704	AT24C16-10PC	I.C(EP-ROM)		*
IC1751	SDA30C163	I.C(MICRO-COMP)		
IC1752	M27C1001-10F1	I.C. (EP-ROM)		
IC1753	AT24C16-10PC	I.C(EP-ROM)		*
IC1754	SDA5275S	I.C. (MICRO-PROC)		
IC1755	MSM514400C60ZS	I.C(D-RAM)		
IC1756	TC4053BP	I.C(DIGI-MOS)		*
IC1757	MN1280-Q	I.C(DIGI-MOS)		*
OTHERS				
	QQR0490-001	NOISE FILTER	×3	
	CEMS009-064	I.C.SOCKET		
	CEMS007-008	I.C.SOCKET		
	CEMS006-068	IC SOCKET		
	CEMS007-032	IC SOCKET		
	CEMS007-008	I.C.SOCKET		
EF1001	CE41433-001Z	BEADS CORE		*
EF1610-12	CE42142-103Z	EMI FILTER		
K1001	CE41433-001Z	BEADS CORE		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
K1003	CE41433-001Z	BEADS CORE		*
K1005	CE41492-001Z	CHOKE COIL		
K1009	CE41433-001Z	BEADS CORE		*
K1011	CE41433-001Z	BEADS CORE		*
K1013-14	CE41433-001Z	BEADS CORE		*
K1602	CE41433-001Z	BEADS CORE		*
K1701-02	CE41433-001Z	BEADS CORE		*
MD1	------------	100Hz PWB ASSY	(Refer to P40)	
MD2	------------	IF PWB ASSY	(Refer to P39)	
MD3	------------	SUB TEXT PB ASSY	(As follows)	
TU1001	CEEK481-A01	TUNER		*
X1311	CE40749-001Z	CRYSTAL		*
X1312	CE40668-001Z	CRYSTAL		*
X1610	CE42546-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER.RESONATOR		*
X1751	QAX0307-001	CER.RESONATOR		
X1752	QAX0351-001Z	X TAL		

SUB TEXT PW BOARD ASS'Y (SMB-1111B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1001	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1003	QCT25CH-270Z	C CAP.	27pF 50V J	*
C1005	QCT25CH-150Z	C CAP.	15pF 50V J	*
C1362	QCT25CH-270Z	C CAP.	27pF 50V J	*
C1701	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1702-04	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1705-07	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
COIL				
L1301	CELP027-390Z	PEAKING COIL	39μH	*
TRANSISTOR				
Q1347	2SK301(P)-T	F.E.T.		*
Q1701-03	2PC1815(YG)-T	SI.TRANSISTOR		*
IC				
IC1001	TC74AC00AP	IC		

IF PW BOARD ASS'Y(SMB0F701B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0103	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R0104	QRSA08J-121YL	CHIP MG R	120 Ω 1/10W J	*
R0105	QRSA08J-151YL	CHIP MG R	150 Ω 1/10W J	*
R0106	QRSA08J-181YL	CHIP MG R	180 Ω 1/10W J	*
R0107	QRSA08J-151YL	CHIP MG R	150 Ω 1/10W J	*
CAPACITOR				
C0020	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0022-25	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0026-27	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0030	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0040	NCT03CH-102AY	CHIP CAP.	1000pF 1600V H	*
C0041	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0042	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0043	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0044	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0046	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0047	QETN1CM-227Z	E CAP.	220μF 16V M	*
C0050	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0051	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0052	QAT3110-100A	TRIM CAP.	10pF 100V	
C0053	NCT03CH-6R0AY	CHIP CAP.	6pF 1600V H	*
C0054	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0055	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0056	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0057	NCT03CH-102AY	CHIP CAP.	1000pF 1600V H	*
C0058	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0059	QAT3110-100A	TRIM CAP.	10pF 100V	
C0060	NCT03CH-120AY	CHIP CAP.	12pF 1600V H	*
C0061	NCT03CH-7R0AY	CHIP CAP.	7pF 1600V H	*
C0062	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0063	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0064	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0065	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0067	NCT03CH-120AY	CHIP CAP.	12pF 1600V H	*
C0069-70	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0071	QETN1HM-336Z	E CAP.	33μF 50V M	
C0080-81	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0101	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0102	NCT03CH-391AY	CHIP CAP.	390pF 1600V H	*
C0103	NCT03CH-121AY	CHIP CAP.	120pF 1600V H	*
C0104	NCT03CH-181AY	CHIP CAP.	180pF 1600V H	*
C0105	NCF21EZ-104AY	C CAP.	0.1μF 25V Z	*
C0140	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C0141	NCB21HK-332AY	CHIP CAP.	3300pF 50V K	*
C0142	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0143	QFLC1HJ-683MZ	M CAP.	0.068μF 50V Z	*
C0144	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C0145	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
C0601	QFLC1HJ-183MZ	M CAP.	0.018μF 50V J	*
C0602	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0603	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0604	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0605	QETN1CM-477Z	E CAP.	470μF 16V M	*
C0606	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
CF0010-11	FTP40.40MF	CERAMIC FILTER		*
TRANSFORMER				
T0020	QQR0626-001	I.F.TRANSF.		*
T0050	CELT001-307	C.WAVE TRANSF.		*
T0051	CELT001-306	C.WAVE TRANSF.		*
COIL				
L0020	CELP041-R47	PEAKING COIL	0.47μH	*
L0021	CE41131-1R5Y	INDUCTOR	1.5μH	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
COIL				
L0030	CE41131-2R2Y	INDUCTOR	2.2 μH	*
L0040	CE41131-120Y	INDUCTOR	12 μH	*
L0041	CE41131-100Y	INDUCTOR	10 μH	*
L0050-53	CE41131-8R2Y	INDUCTOR	8.2 μH	*
L0070	CE41131-5R6Y	INDUCTOR	5.6 μH	*
L0071	CE41131-8R2Y	INDUCTOR	8.2 μH	*
L0101	CE41131-6R8Y	INDUCTOR	6.8 μH	*
L0102-03	CE41131-100Y	INDUCTOR	10 μH	*
L0104	CE41131-5R6Y	INDUCTOR	5.6 μH	*
DIODE				
D0020-21	1SS85-T5	SI. DIODE		
D0050-51	1SS85-T5	SI. DIODE		
TRANSISTOR				
Q0012	2SC5083 (L-P) -T	SI. TRANSISTOR		*
Q0080	2SC2712 (YG) -X	SI. TRANSISTOR		*
Q0101	2SC2712 (YG) -X	SI. TRANSISTOR		*
Q0102	2SA1162 (YG) -X	SI. TRANSISTOR		*
Q0103	DTC144EK-X	DIGI. TRANSISTOR		*
Q0104	2SC2712 (YG) -X	SI. TRANSISTOR		*
Q0106	2SC2712 (YG) -X	SI. TRANSISTOR		*
Q0107	2SA1162 (YG) -X	SI. TRANSISTOR		*
Q0108	DTC144EK-X	DIGI. TRANSISTOR		*
Q0109-11	2SC2712 (YG) -X	SI. TRANSISTOR		*
Q0120-26	DTC144EK-X	DIGI. TRANSISTOR		*
Q0601-02	2SC2712 (YG) -X	SI. TRANSISTOR		*
IC				
IC0010	TA8865BN	I. C (MONO-ANA)		
OTHERS				
CF0100	TPS5. 5MW	CERAMIC FILTER		*
CF0140	CSB503F30-T2	CER. RESONATOR		*
⚠ R0609	QRZ0054-470M	F R	47 Ω 1/4W J	*
SF0010	QAX0316-001	SAW FILTER		*
SF0011	CE42574-702	SAW FILTER		
SF0012	CE42606-701	SAW FILTER		

100Hz PW BOARD ASS'Y (SMB0Z002B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0302	NRVA02D-1502NY	M. F. R	15kΩ 1/10W J	
R0303	NRVA02D-1102NY	CHIP MF R	11kΩ 1/10W J	
CAPACITOR				
C0001	QETN1CM-227Z	E CAP.	220 μF 16V M	*
C0002	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0003	QETN1CM-227Z	E CAP.	220 μF 16V M	*
C0004	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0005	QETN1CM-227Z	E CAP.	220 μF 16V M	*
C0006	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0007	QETN1CM-227Z	E CAP.	220 μF 16V M	*
C0008	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0009-10	QETN1AM-108Z	E CAP.	1000 μF 10V M	*
C0101	NCS21HJ-151AY	C CAP.	150 pF 50V J	*
C0102	NCT03CH-390AY	CHIP CAP.	39 pF 1600V H	*
C0103	NCS21HJ-271AY	CER. CAP.	270 pF 50V J	*
C0106	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C0107	NCF21HZ-224AY	CHIP C CAP.	0.22 μF 50V Z	
C0108	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0109	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0111	NCS21HJ-151AY	C CAP.	150 pF 50V J	*
C0112	NCT03CH-390AY	CHIP CAP.	39 pF 1600V H	*
C0113	NCS21HJ-271AY	CER. CAP.	270 pF 50V J	*
C0116	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C0117	NCF21HZ-224AY	CHIP C CAP.	0.22 μF 50V Z	
C0118	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0121	NCS21HJ-151AY	C CAP.	150 pF 50V J	*
C0122	NCT03CH-390AY	CHIP CAP.	39 pF 1600V H	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0123	NCS21HJ-271AY	CER. CAP.	270 pF 50V J	*
C0126	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0127	NCF21HZ-224AY	CHIP C CAP.	0.22 μF 50V Z	
C0128	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0131	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0132	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0133	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0134	NCF21EZ-104AY	C CAP.	0.1 μFF 25V Z	*
C0135-36	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0137	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0138	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0139	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0142-47	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0148	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0149-54	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0155	NCT03CH-390AY	CHIP CAP.	39 pF 1600V H	*
C0201-06	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0207	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0208-13	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0214	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0221-38	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0301	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0302	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0303	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0304	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0307-08	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0309	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0310	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0311	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0313	NCS21HJ-152AY	CHIP C CAP.	1500 pF 50V J	*
C0314-18	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0321	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C0322	NCF21HZ-224AY	CHIP C CAP.	0.22 μF 50V Z	
C0323	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0324	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0331	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C0332	NCF21HZ-224AY	CHIP C CAP.	0.22 μF 50V Z	
C0333	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0341	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0342	QETN1HM-105Z	E CAP.	1 μF 50V M	*
C0343	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0401	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0402	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0403	QETN0JM-227Z	E CAP.	220 μF 6.3V M	*
C0404	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0405	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0406	NCF21EZ-104AY	C CAP.	0.1 μF 50V Z	*
C0407	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0408	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0409-10	NCT03CH-270AY	CHIP CAP.	27 pF 1600V H	*
C0411	NCT03CH-180AY	CHIP CAP.	18 pF 1600V H	*
C0412-13	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0415	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
COIL				
L0001-02	CE40344-4R7YL	INDUCTOR	4.7 μH	*
L0003-04	CE40344-100YL	INDUCTOR	10 μH	*
L0005-07	CE40344-4R7YL	INDUCTOR	4.7 μH	*
L0101	CE41131-3R3Y	INDUCTOR	3.3 μH	*
L0111	CE41131-3R3Y	INDUCTOR	3.3 μH	*
L0121	CE41131-3R3Y	INDUCTOR	3.3 μH	*
L0301	CE41131-100Y	INDUCTOR	10 μH	*
L0401-02	CE40344-330YL	INDUCTOR	33 μH	*
DIODE				
D0301	MA3051 (L) -X	ZENER DIODE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	Q0101	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0102	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0103	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0104	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0111	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0112	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0113	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0114	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0121	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0122	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0123	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0124	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0131	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0321	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0322	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0323	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0324	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0331	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0332	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0333	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0334	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0341	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0342	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0343	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0344-45	2SA1162(YG)-X	SI. TRANSISTOR		*
	Q0351	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0361	2SC2712(YG)-X	SI. TRANSISTOR		*
	Q0401	2SC2712(YG)-X	SI. TRANSISTOR		*
	IC				
	IC0101	SDA9205-2-W	I.C(DIGI-MOS)		*
	IC0201	SDA9272	I.C(MICRO-COMP)		
	IC0202	SDA9251-X	I.C(SAM)		*
	IC0203-04	SDA9253	I.C(SAM)		
	IC0301	SDA9280-W	I.C(DIGI-OTHER)		*
	IC0401	SDA9257	I.C(DIGI-OTHER)		
	IC0402	MC74F04M-X	I C		
	OTHERS				
	DL0321	NQR0241-001X	L.P.F		*
	DL0331	NQR0241-001X	L.P.F		*
	DL0341	NQR0242-001X	L.P.F		*
	EF0001-05	CE42482-103Y	EMI FILTER		*
	EF0006	CE42482-470Y	EMI FILTER		*
	EF0101	CE42482-470Y	EMI FILTER		*
	EF0111	CE42482-470Y	EMI FILTER		*
	EF0121	CE42482-470Y	EMI FILTER		*
	EF0321	CE42482-470Y	EMI FILTER		*
	EF0331	CE42482-470Y	EMI FILTER		*
	EF0341-42	CE42482-470Y	EMI FILTER		*
	EF0351	CE42482-470Y	EMI FILTER		*
	EF0361	CE42482-470Y	EMI FILTER		*
	K0001	CE41433-001Z	BEADS CORE		*
	X0401	QAX0350-001	X TAL		

DEF POWER PW BOARD ASS'Y (SMB-2002B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R2409	QRX019J-1R0S	MF R	1 Ω 1W J	*
	R2411	QRG029J-221	OM R	220 Ω 2W J	
	R2412-13	QRX019J-1R8S	MF R	1.8 Ω 1W J	*
	R2418	QRV141F-6802AY	MF R	68kΩ 1/4W F	
	R2419	QRV141F-7870AY	MF R	787 Ω 1/4W F	
	R2421	QRV141F-1003AY	MF R	100kΩ 1/4W F	
	R2422	QRV141F-1501AY	MF R	1.5kΩ 1/4W F	
	R2508	QRV141F-1962AY	MF R	19.6kΩ 1/4W F	
	R2509	QRV141F-5101AY	MF R	5.1kΩ 1/4W F	
	R2516	QRG039J-272	OM R	2.7kΩ 3W J	
	R2517	QRG039J-122	OM R	1.2kΩ 3W J	
	R2533	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2571	QRG029J-223	OM R	22kΩ 2W J	*
	R2581	QRF104J-100	UNF R	10 Ω 10W J	*
	R2902	QRF154K-4R7	UNF R	4.7 Ω 15W K	*
	R2905	QRG039J-333	OM R	33kΩ 3W J	*
	R2907	QRM059J-R22	MP R	0.22 Ω 5W J	*
	R2910	QRG039J-393	OM R	39kΩ 3W J	
	R2951	QRF074J-102	UNF R	1kΩ 7W J	*
	R2952	QRG029J-123	OM R	12kΩ 2W J	*
	R2953	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2962-63	QRG019J-220S	OM R	22 Ω 1W J	*
⚠	R2991	QRZ0057-825	C R	8.2MΩ 1W J	*
	CAPACITOR				
	C2401	QFLC2AJ-104MZ	M CAP.	0.1μF 100V J	*
	C2402	QETC1VM-337Z	E CAP.	330μF 35V M	*
	C2403	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C2405	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J	*
	C2406	QFLC2AJ-104MZ	M CAP.	0.1μF 100V J	*
	C2407	QFLC2AK-223MZ	M CAP.	0.022μF 100V K	*
	C2410	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J	*
	C2411	QETN1HM-226Z	E CAP.	22μF 50V M	*
	C2412	QETM1VM-108	E CAP.	1000μF 35V M	*
	C2415	QCT25CH-470Z	C CAP.	47pF 50V J	*
	C2501	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J	*
	C2502	QETN1CM-108Z	E CAP.	1000μF 16V M	*
	C2503	QETN2AM-106Z	E CAP.	10μF 100V M	*
	C2504	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2505	QFLC2AJ-102MZ	M CAP.	1000pF 100V J	*
	C2507	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
	C2508	QFM72DK-103M	M CAP.	0.01μF 200V K	*
	C2509	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2520	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	*
	C2521	QFZ0117-1801S	MPP CAP.	1800pF 2000V±2.5%	*
	C2522	QFZ0117-4501S	MPP CAP.	4500pF 2000V±2.5%	
	C2523	QFM72DK-683M	M CAP.	0.068μF 200V K	*
	C2525	QFZ0117-4001S	MPP CAP.	4000pF 2000V±2.5%	
	C2526	QFZ0119-434S	MPP CAP.	0.43μF 200V J	*
	C2527	QFZ0119-514S	MPP CAP.	0.51μF 200V J	*
	C2528	QFZ0119-304S	MPP CAP.	0.3μF 200V J	*
	C2529	QFZ0128-204S	MPP CAP.	0.2μF 400V ±3%	
	C2533	QFZ0194-304	MPP CAP.	0.3μF 250V J	*
	C2536	QFZ0119-534S	MPP CAP.	0.53μF 200V ±3%	*
	C2537	QETM2CM-227	E CAP.	220μF 160V M	*
	C2541	QEZ0195-475MZ	E CAP.	4.7μF 50V M	*
	C2544	QETN1EM-476Z	E CAP.	47μF 25V M	*
	C2545	QETN1AM-107Z	E CAP.	100μF 10V M	*
	C2546	QFLC1HK-104MZ	M CAP.	0.1μF 50V K	*
	C2551	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
	C2554	QETN2EM-106Z	E CAP.	10μF 250V M	*
	C2555-56	QETN1EM-108Z	E CAP.	1000μF 25V M	*
	C2581	QETC0JM-107Z	E CAP.	100μF 6.3V M	*
	C2582	QETN1CM-476Z	E CAP.	47μF 16V M	*
⚠	C2902	QFZ9040-473N	MM CAP.	0.47μF 400V M	*

CAPACITOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
C2903	QCZ9034-472A	C CAP.	0.047μF 400V P	*
C2904-05	QCZ9034-472A	C CAP.	4700pF 400V P	*
C2906	QEZ0199-227M	E CAP.	220μF	
C2908	QCZ0122-151A	C CAP.	150pF 2000V K	*
C2909	QCZ0122-221A	C CAP.	220pF 2000V K	*
C2910	QETN1EM-227Z	E CAP.	220μF 25V M	*
C2914	QFLC1HK-104MZ	M CAP.	0.1μF 50V K	*
C2916	QFLC1HJ-102MZ	M CAP.	1000pF 50V J	*
C2919	QETN1HM-105Z	E CAP.	1μF 50V M	*
C2920	QFLC1HJ-472MZ	M CAP.	4700pF 50V J	*
C2951	QEZ0203-227	E CAP.	200μF 160V M	
C2952	QEHC1CM-108MZ	E CAP.	1000μF 16V M	*
C2953	QEHB1CM-108M	E CAP.	1000μF 16V M	*
C2954	QEZ0106-228R	E CAP.	2200μF 10V M	
C2966-68	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C2970	QEHC1HM-336MZ	E CAP.	33μF 50V M	*
C2971	QEHC1CM-107MZ	E CAP.	100μF 16V M	*
C2972	QETN1AM-228Z	E CAP.	2200μF 10V M	*
C2973	QEHC1AM-227MZ	E CAP.	220μF 10V M	*
C2975	QEHB1CM-228M	E CAP.	2200μF 16V M	*
C2976	QEZ0106-228R	E CAP.	2200μF 10V M	
C2977	QEHC1AM-107MZ	E CAP.	100μF 10V M	*
C2978	QCZ0122-151A	C CAP.	150pF 2000V K	*
C2981	QETN1EM-227Z	E CAP.	220μF 25V M	*
C2982-83	QETN1HM-106Z	E CAP.	10μF 50V M	*
⚠ C2991	QCZ9041-471A	C CAP.	470pF 400V K	*
⚠ C2992	QCZ9041-332A	C CAP.	330pF 400V M	*

TRANSFORMER

⚠ Symbol No.	Part No.	Part Name	Description	Local
T2501	CE42672-001	DRIVE TRANSF		*
T2521	QQR0706-001	PINC. TRANSF.		*
⚠ T2551	CETH020-00AJ1	H.V.T(SERVICE)		*
⚠ T2901	CETS089-001J4	SWITCH. TRANSF.		*
T2981	QQT0147-001	POWER TRANSF.		*

COIL

⚠ Symbol No.	Part No.	Part Name	Description	Local
L2521	QQR0707-001	LINEARITY COIL		*
L2541	QQR0705-001	CHOKE COIL		*
L2551	CELC901-046J6	HEATER CHOKE		*
L2901-02	CELC055-100	CHOKE COIL		*
L2903	CELC005-2R5J7	CHOKE COIL	2.5μH	*
L2951	CELC901-046J6	HEATER CHOKE		*
L2952-53	CELC057-5R6Z	CHOKE COIL	5.6μH	

DIODE

⚠ Symbol No.	Part No.	Part Name	Description	Local
D2401	MTZJ75-T2	ZENER DIODE		*
D2402	BYD33D-T3	SI.DIODE		*
D2403	1SS133-T2	SI.DIODE		*
D2404	MTZJ7.5S-T2	ZENER DIODE		*
D2405	1SS133-T2	SI.DIODE		*
D2406-09	MA700A-T2	SI.DIODE		*
D2410	1SS133-T2	SI.DIODE		*
D2411	MTZJ22(B)-T2	ZENER DIODE		*
D2501	BYD33G-T3	SI.DIODE		*
D2502	MTZJ7.5S-T2	ZENER DIODE		*
D2504	1SS133-T2	SI.DIODE		*
D2505	MTZJ6.8(A)-T2	ZENER DIODE		*
D2506	1SS146-T2	SI.DIODE		*
D2507	1SS81-T5	SI.DIODE		*
D2508	1SS133-T2	SI.DIODE		*
D2521	FMV-3FU-C1	SI.DIODE		
D2525	V11CA-C1	SI.DIODE		*
D2541	MTZJ6.8(C)-T2	ZENER DIODE		*
D2542	1SS133-T2	SI.DIODE		*
D2550-51	BYD33G-T3	SI.DIODE		*
D2552-53	BYW95B-20	SI.DIODE		

DIODE

⚠ Symbol No.	Part No.	Part Name	Description	Local
D2556	BYD33G-T3	SI.DIODE		*
D2571	MTZJ33(B)-T2	ZENER DIODE		*
D2581	MTZJ15(B)-T2	ZENER DIODE		*
D2582	MTZJ7.5(B)-T2	ZENER DIODE		*
D2585	1SS133-T2	SI.DIODE		*
D2901	D3SB60	BRIDGE DIODE		
D2902	BYD33M-T3	SI.DIODE		*
D2903	1SR124-400A-T2	SI.DIODE		*
D2904-05	BYD33D-T3	SI.DIODE		*
D2951-52	RU4C-C1	SI.DIODE		
D2953	BYD33M-T3	SI.DIODE		*
D2954-55	BYW95B-20	SI.DIODE		*
D2956	SF6L20U	SI.DIODE		
D2958-59	SF6L20U	SI.DIODE		
D2960	MTZJ5.1(A)-T2	ZENER DIODE		*
D2961	MTZJ5.6(A)-T2	ZENER DIODE		*
D2962-66	1SS133-T2	SI.DIODE		*
D2968	1SS133-T2	SI.DIODE		*
D2970	1SS133-T2	SI.DIODE		*
D2981-84	1N4003-T2	SI.DIODE		*
D2985	1SS133-T2	SI.DIODE		*
D2986	MTZJ8.2(B)-T2	ZENER DIODE		*
D2987	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		
Q2403	2PC1815(YG)-T	SI.TRANSISTOR		*
Q2404	DTC144ESA-T	DIGI.TRANSISTOR		
Q2405-06	2PC1815(YG)-T	SI.TRANSISTOR		*
Q2501	BSN274	F.E.T.		*
Q2505	2PA1015(YG)-T	SI.TRANSISTOR		*
Q2506	2PC1815(YG)-T	SI.TRANSISTOR		*
Q2521	2SC5406-RL	SI.TRANSISTOR		*
Q2523	IRF640	F.E.T.		
Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
Q2541	2SD1408(OY)-LB	SI.TRANSISTOR		
Q2551	DTA124ESA-T	DIGI.TRANSISTOR		
Q2552	DTC144ESA-T	DIGI.TRANSISTOR		
Q2581	2SA949(Y)C1	SI.TRANSISTOR		*
Q2582	DTC144ESA-T	DIGI.TRANSISTOR		
Q2901	2SK2148-C1	F.E.T.		
Q2955	2PC1815(YG)-T	SI.TRANSISTOR		*
Q2981	2SC2655(Y)-T	SI.TRANSISTOR		*
Q2982	2PC1815(YG)-T	SI.TRANSISTOR		*

IC

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC2401	LA7841	I.C(MONO-ANA)		
IC2501	TDA9151B	I.C(DEF-PRO)		*
IC2541	UPC4558C	I.C(MONO-ANA)		
IC2901	MC44603P	I.C(MONO-ANA)		*
IC2951	SE135N	I.C(HYBRID)		*
IC2952	LM2940CT-12	I.C(MONO-ANA)		
IC2953	UPC2409AHF	I.C(MONO-ANA)		
IC2954	KIA7808PI	I.C(MONO-ANA)		*
IC2955-56	PQ05RF21	I.C(MONO-ANA)		
IC2957	KIA7808PI	I.C(MONO-ANA)		*

OTHERS

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ FR2551	QRH017J-1R0M	F R	1Ω 1W J	*
⚠ FR2552	QRH017J-1R0M	F R	1Ω 1W J	*
⚠ FR2553	QRZ0054-4R7M	F R	4.7Ω 1/4W J	*
K2402	CE41433-001Z	BEADS CORE		*
K2502-05	QQR0679-001	FERRITE BEADS		
K2506	CE41433-001Z	BEADS CORE		*
K2901-04	CE42050-001Z	CORE		*
K2951	CE41433-001Z	BEADS CORE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	PC2521	TLP621(B)	I.C(PH.COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C(PH.COUPLER)		*
	RY2981	CESK028-002	RELAY		*
	TH2901	CEKP002-003	W.P.THERMISTOR		*

CRT SOCKET PW BOARD ASS'Y (SMB-3002B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3106	QRD14CJ-100SX	C R	10 Ω 1/4W J	
	R3119	QRG029J-391A	OM R	390 Ω 2W J	*
	R3229-31	QRG019J-823S	OM R	82kΩ 1W J	
	CAPACITOR				
	C3101	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3102	QFLC1HK-103MZ	M CAP.	0.01μF 50V K	*
	C3103	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C3104	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3107	QETC2CM-106Z	E CAP.	10μF 160V M	*
	C3110	QETC2CM-106Z	E CAP.	10μF 160V M	*
	C3111	QETC0JM-107Z	E CAP.	100μF 6.3V M	*
	C3118	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3204-09	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
	C3210-12	QFH62EK-104MZ	MM CAP.	0.1μF 250V K	*
	C3218	QETM2EM-336	E CAP.	33μF 250V M	*
	C3219	QFZ0097-223M	M M CAP.	0.022μF 1250V K	*
	C3221	QETC2EM-106Z	E CAP.	10μF 250V M	*
	C3301	QETN1CM-107Z	E CAP.	100μF 16V M	*
	COIL				
	L3101	CELP026-150Z	PEAKING COIL	15μH	*
	L3201-03	CELP026-4R7Z	PEAKING COIL	4.7μH	*
	DIODE				
	D3101-02	RH1S-T3	SI.DIODE		*
	D3103	MA165-T2	SI.DIODE		*
	D3151	1SS133-T2	SI.DIODE		*
	D3204-06	EU01N-T2	SI.DIODE		
	D3301	1SS252-T2	SI.DIODE		*
	D3302-03	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q3101	2SA1309A(QR)-T	SI.TRANSISTOR		*
	Q3102-03	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q3104	2SA1309A(QR)-T	SI.TRANSISTOR		*
	Q3105	2SA1837	SI.TRANSISTOR		
	Q3106	2SC4793	SI.TRANSISTOR		
	Q3107	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q3108	2SC1906-T	SI.TRANSISTOR		*
	Q3301	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q3302	2SC2655(Y)-T	SI.TRANSISTOR		*
	Q3303	2PA1015(YG)-T	SI.TRANSISTOR		*
	IC				
	IC3201-03	TDA6111Q	I.C(MONO-ANA)		
	OTHERS				
	K3101-04	CE41492-001Z	CHOKE COIL		
⚠	R3109	QRH017J-561M	F R	560 Ω 1W J	*
⚠	SK3001	CE42535-001J1	C.R.T.SOCKET		*

AUDIO PW BOARD ASS'Y (SMB-6001B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C6101	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6102-03	QETM1EM-228	E CAP.	2200μF 25V M	*
	C6105	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C6106	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C6108	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6109-10	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C6112	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C6113	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C6115-16	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6117-18	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C6121	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
	DIODE				
	D6101-04	MTZJ27(B)-T2	ZENER DIODE		*
	D6105	MTZJ5.1(B)-T2	ZENER DIODE		*
	D6107	1SS133-T2	SI.DIODE		*
	D6108	MA700-T2	SI.DIODE		*
	D6112	1SS133-T2	SI.DIODE		*
	D6115	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q6101	DTC144ESA-T	DIGI.TRANSISTOR		
	Q6102	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q6104	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q6105	DTC144ESA-T	DIGI.TRANSISTOR		
	Q6106-07	DTC323TS-T	DIGI.TRANSISTOR		*
	IC				
	IC6101-02	TDA2052V	I.C(MONO-ANA)		*
	OTHERS				
	K6001-02	CE41433-001Z	BEADS CORE		*

FRONT CONTROL PW BOARD ASS'Y (SMB-8002B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C8003	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8004	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
	C8005	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8009	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8012	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8013-14	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C8017-18	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8020-21	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
⚠	C8901	QFZ9040-474N	MF CAP.	0.47μF	*
	COIL				
	L8001	CE41832-001	LEAD CORE		*
	L8002-03	CELP017-5R6Y	PEAKING COIL	5.6μH	*
	L8010-11	CELP017-270Y	PEAKING COIL	27μH	*
	L8012	CE41832-001	LEAD CORE		*
	DIODE				
	D8007	P1201	C.D.S.		*
	D8008	1SS133-T2	SI.DIODE		*
	D8009	SLR-342MG-T16	L.E.D. (GRN)	ECO	*
	D8010	SPR-39MVWF	L.E.D.	POWER	*
	D8011	1SS133-T2	SI.DIODE		*
	D8012	SLR-342DU-T16	L.E.D. (ORG)	TIMER	*
	D8013	SLR-342YY-T16	L.E.D. (YLW)	3D-PHONIC	*
	D8014	MTZJ6.8(A)-T2	ZENER DIODE		*
	D8015-16	MTZJ15(C)-T2	ZENER DIODE		*
	D8017	MTZJ6.2(B)-T2	ZENER DIODE		*
	D8018	MTZJ5.1(B)-T2	ZENER DIODE		*
	TRANSISTOR				
	Q8001	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q8002	DTC144ES-T	DIGI.TRANSISTOR		*
	Q8003-04	DTA144ESA-T	DIGI.TRANSISTOR		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
	CEMG002-001Z	FUSE CLIP		*
	CM36548-001-E	L. E. D. HOLDER		*
	CM35921-A04-H	CDS HOLDER		
⚠ F8901	QMF51D2-3R15J1	FUSE	3. 15A	*
J8001	QMS3007-C01	JACK	HEADPHONE	
J8004	CEMN011-001	JACK	V4IN	*
J8005	CEMN011-002	JACK	L4IN	*
J8006	CEMN011-003	JACK	R4IN	*
⚠ LF8901	CELF012-001J7	LINE FILTER		*
⚠ LF8902	CELF012-001J7	LINE FILTER		*
S8001	CESP001-001	PUSH SWITCH	CH UP/DOWN	
S8002	CESP001-001	PUSH SWITCH	MENU	
⚠ S8901	QSP4K21-C01	PUSH SWITCH	MAIN POWER	*

DOLBY PW BOARD ASS'Y (SMB0D002B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0101	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0102	NCT03CH-680AY	CHIP CAP.	68pF 1600V H	*
C0103	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0104	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0105	NCB21HK-223AY	CHIP CAP.	0. 022μF 50V K	*
C0106	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0107	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0108	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0109	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0110	NCT03CH-680AY	CHIP CAP.	68pF 1600V H	*
C0111	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0112-13	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0115	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0116-25	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0126	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0127-28	NCT03CH-220AY	CHIP CAP.	22pF 1600V H	*
C0129	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0130	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0131	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0132	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0133	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0134	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0135	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0136	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0137-38	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0139	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0140	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0141	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C0142	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0143	NCF21EZ-104AY	C CAP.	0. 1μF 25V Z	*
C0144	QETN1CM-227Z	E CAP.	220μF 16V M	*
C0145	NCF21EZ-104AY	C CAP.	0. 1μF 25V Z	*
C0146	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0147-53	NCF21EZ-104AY	C CAP.	0. 1μF 25V Z	*
C0201	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0202	NCB21HK-223AY	CHIP CAP.	0. 022μF 50V K	*
C0203	NCB21HK-182AY	CHIP CAP.	1800pF 50V K	*
C0204	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0205	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0206	NCB21HK-223AY	CHIP CAP.	0. 022μF 50V K	*
C0207	NCB21HK-182AY	CHIP CAP.	1800pF 50V K	*
C0208	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0209	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0210	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0211	NCB21HK-182AY	CHIP CAP.	1800pF 50V K	*
C0212	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0213	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0214	NCB21HK-223AY	CHIP CAP.	0. 022μF 50V K	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0215	NCB21HK-182AY	CHIP CAP.	1800pF 50V K	*
C0216	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0217	NCB21HK-223AY	CHIP CAP.	0. 022μF 50V K	*
C0218-21	NCT03CH-470AY	CHIP CAP.	47pF 1600V H	*
C0305	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0401	QETN1HM-226Z	E CAP.	22μF 50V M	*
C0402	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0403-04	NCB21HK-272AY	CHIP CAP.	2700pF 50V K	*
C0405-06	QETN1HM-225Z	E CAP.	2. 2μF 50V M	*
C0407-10	NCF21EZ-104AY	C CAP.	0. 1μF 25V Z	*
C0431	QETN1HM-226Z	E CAP.	22μF 50V M	*
C0432	QETN1CM-477Z	E CAP.	470μF 16V M	*
C0433-34	NCB21HK-272AY	CHIP CAP.	2700pF 50V K	*
C0435	QETN1HM-225Z	E CAP.	2. 2μF 50V M	*
C0436-39	NCF21EZ-104AY	C CAP.	0. 1μF 25V Z	*
C0440	QETN1HM-225Z	E CAP.	2. 2μF 50V M	*
C0451	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0452	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
C0453	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0454	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0456	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0457	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0458	NCB21HK-473AY	CHIP CAP.	0. 047μF 50V K	*
C0459	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0460	NCB21HK-103AY	CHIP CAP.	0. 01μF 50V K	*
C0461	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
C0462	NCF21CZ-105AY	CER. CAP.	1μF 16V Z	*
C0465	NCF21CZ-105AY	CER. CAP.	1μF 16V Z	*
C0501-02	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0503-04	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
C0505	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0507-08	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0531	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0532	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
C0536	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0551	NCF21CZ-105AY	C CAP.	1μF 16V Z	*
C0553	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
C0555	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0556	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0557	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0601-02	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0603-04	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0701-05	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
COIL				
L0101-04	CE40344-4R7YL	INDUCTOR	4. 7μH	*
L0701-05	CE40344-100YL	INDUCTOR	10μH	*
L0706	CE41433-001Z	BEADS CORE		*
DIODE				
D0103	MA3062(M)-X	ZENER DIODE		*
D0201	MA3062(M)-X	ZENER DIODE		*
D0451	MA141WK-X	SI. DIODE		
D0452	MA3062(M)-X	ZENER DIODE		*
D0453	MA141WK-X	SI. DIODE		
D0454	MA3062(M)-X	ZENER DIODE		*
D0501-02	MA3150(M)-X	ZENER DIODE		*
D0503	MA3062-X	ZENER DIODE		*
D0532	MA3150(M)-X	ZENER DIODE		*
D0552	MA3150(M)-X	ZENER DIODE		*
TRANSISTOR				
Q0302	DTC144EK-X	DIGI. TRANSISTOR		*
Q0451-52	DTC323TK-X	DIGI. TRANSISTOR		*
Q0453	DTC144EK-X	DIGI. TRANSISTOR		*
Q0501	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0502-03	DTC323TK-X	DIGI. TRANSISTOR		*
Q0531	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0532	DTC323TK-X	DIGI. TRANSISTOR		*
Q0551	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0553	DTC323TK-X	DIGI. TRANSISTOR		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
I C				
IC0101	SAA7367T-X	I.C(DIGI-MOS)		
IC0102	TMS57052BFT	I.C(M)		
IC0103	LC32464M-80X	I.C(D-RAM)		
IC0104-05	PCM1717E-X	I.C(MONO-ANA)		
IC0111	BA4558F-X	I.C(MONO-ANA)		
IC0201-02	UPC324G2-X	I.C(MONO-ANA)		
IC0301	TC4052BF-X	I.C(DIGI-MOS)		
IC0401	TDA7315D	I.C(DIGI-OTHER		
IC0431	TDA7315D	I.C(DIGI-OTHER		
IC0451-52	BA4558F-X	I.C(MONO-ANA)		
IC0501	BA4558F-X	I.C(MONO-ANA)		
IC0551	BA4558F-X	I.C(MONO-ANA)		
OTHERS				
EF0101-05	CE42482-103Y	EMI FILTER		*
J0001	CEMN036-004	PIN JACK		
J0002	CEMN061-001	PIN JACK		
K0101-02	CE42681-001Y	BEADS CORE		
K0104-07	CE42681-001Y	BEADS CORE		
K0108	CE41433-001Z	BEADS CORE		*
X0101	NAX0001-001X	CRYSTAL		

AV TERMINAL PW BOARD ASS'Y (SMB0J001B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0102-04	QEKC1CM-106GMZ	E CAP.	10μF 16V M	
C0301	QEKC1CM-476MZ	E CAP.	47μF 16V M	*
COIL				
L0101-04	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0105	CE41832-001	LEAD CORE		*
L0201-04	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0205	CE41832-001	LEAD CORE		*
L0301-02	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0303	CE41832-001	LEAD CORE		*
OTHERS				
J0001-03	CE40529-006	SCART CONNECTOR		

AUTO ASPECT MODULE PW BOARD ASS'Y (SJF0W001A(U))

⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
	SJF0W001A(U)	AUTO ASPECT MODULE		

PRINTED WIRING BOARD PARTS LIST [redacted]

MAIN PW BOARD ASS'Y (SMB-1003B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRD12CJ-474SX	C R	470kΩ 1/2W J	*
R1206	QRG019J-101S	OM R	100 Ω 1W J	*
R1229	QRD123J-181SX	C R	180 Ω 1/2W J	*
R1231	QRG019J-101S	OM R	100 Ω 1W J	*
R1748	QRB069J-103	NET. R		*
R1798-99	QRD12CJ-820SX	C R	82 Ω 1/2W J	
CAPACITOR				
C1001	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1002	QETC1HM-107Z	E CAP.	100μF 50V M	*
C1003	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1004	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1005	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1006	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1008	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1011	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1012	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1201	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1203-04	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1205-06	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1207	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1209	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1210	QETN1CM-477Z	E CAP.	470μF 16V M	*
C1212-13	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1214-15	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1216-17	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1218-19	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1220	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1221-22	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1223-24	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1231-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1301	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1302	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1304	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1305	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1306	QFLC1HJ-223MZ	M CAP.	0.022μF 50V J	*
C1307-08	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1311-13	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1315	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J	*
C1316	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1317	QFV71HJ-154MZ	TF CAP.	0.15μF 50V J	*
C1318	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1320	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1321-22	QCT25CH-120Z	C CAP.	12pF 50V J	*
C1323	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1325-26	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1327	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1328-32	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1335	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C1341	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
C1348	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1350-52	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1353-55	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	*
C1357	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1358	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1359	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1360	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1363	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1365	QEZ0106-228R	E CAP.	2200μH 10V M	
C1610-11	QCT25CH-2R0Z	C CAP.	2pF 50V J	*
C1612	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1615	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1616	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1617	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1623-24	QETN1HM-105Z	E CAP.	1μF 50V M	*

⚠ Symbol No.	Part No.	Part Name	Description			Local
CAPACITOR						
C1625	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1626	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1627	QETN1HM-105Z	E CAP.	1μF	50V	M	*
C1629-30	QETN1HM-105Z	E CAP.	1μF	50V	M	*
C1631	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1632	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1633	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1645	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1646	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1647	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1649	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1660	QFLC1HJ-333MZ	M CAP.	0.033μF	50V	J	*
C1703	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1704	QETN1AM-107Z	E CAP.	100μF	10V	M	*
C1705-06	QCT25CH-3R0Z	C CAP.	3pF	50V	J	*
C1707	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1708	QFLC1HJ-333MZ	M CAP.	0.033μF	50V	J	*
C1709	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1710	QETN1EM-476Z	E CAP.	47μF	25V	M	*
C1711	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1712	QFLC1HJ-333MZ	M CAP.	0.033μF	50V	J	*
C1713	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1714	QETN1HM-474Z	E CAP.	0.47μF	50V	M	*
C1715	QETN1CM-476Z	E CAP.	47μF	16V	M	*
C1716	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1717	QETN1HM-105Z	E CAP.	1μF	50V	M	*
C1751	QFLC1HJ-563MZ	M CAP.	0.056μF	50V	J	*
C1752	QFV71HJ-224MZ	TF CAP.	0.22μF	50V	J	*
C1754	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1756-57	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1758	QETN1AM-227Z	E CAP.	220μF	10V	M	*
C1759	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1760-61	QCT25CH-150Z	C CAP.	15pF	50V	J	*
C1762	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1763	QETN1CM-476Z	E CAP.	47μF	16V	M	*
C1764	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1766-68	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1769-71	QETN1HM-106Z	E CAP.	10μF	50V	M	*
C1772	QETN1CM-476Z	E CAP.	47μF	16V	M	*
C1773	QETN1CM-107Z	E CAP.	100μF	16V	M	*
C1776	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1780	QFLC1HJ-104MZ	M CAP.	0.1μF	50V	J	*
C1781	QCZ0120-104MZ	C CAP.	0.1μF	25V	Z	*
C1782	QFLC1HJ-223MZ	M CAP.	0.022μF	50V	J	*
C1801	QETN1EM-107Z	E CAP.	100μF	25V	M	*
COIL						
L1001-02	CELP026-8R2Z	PEAKING COIL	8.2μH			*
L1003	CELP026-221Z	PEAKING COIL	220μH			*
L1601	CELP027-220Z	PEAKING COIL	22μH			*
L1602	CELP027-180Z	PEAKING COIL	18μH			*
L1611-12	CELC005-2R5J7	CHOKE COIL	2.5μH			*
L1701	CELP026-4R7Z	PEAKING COIL	4.7μH			*
L1702	CELP026-8R2Z	PEAKING COIL	8.2μH			*
L1753	CELP026-4R7Z	PEAKING COIL	4.7μH			*
L1791-92	CELP026-8R2Z	PEAKING COIL	8.2μH			*
DIODE						
D1201-11	MTZJ13(B)-T2	ZENER DIODE				*
D1212-13	1SS133-T2	SI.DIODE				*
D1214-15	MTZJ13(B)-T2	ZENER DIODE				*
D1343	1SS133-T2	SI.DIODE				*
D1345-48	1SS133-T2	SI.DIODE				*
D1349	MTZJ6.2(B)-T2	ZENER DIODE				*
D1350-53	1SS133-T2	SI.DIODE				*

⚠ Symbol No.	Part No.	Part Name	Description	Local
DIODE				
D1356	1SS146-T2	SI.DIODE		*
D1357-58	1SS133-T2	SI.DIODE		*
D1701-02	1SS133-T2	SI.DIODE		*
D1704	1SS146-T2	SI.DIODE		*
D1705	1SS133-T2	SI.DIODE		*
D1710-11	1SS133-T2	SI.DIODE		*
D1751-53	1SS133-T2	SI.DIODE		*
D1754-58	MTZJ6.2(B)-T2	ZENER DIODE		*
D1801-02	1SS133-T2	SI.DIODE		*
D1803	MTZJ6.8(A)-T2	ZENER DIODE		*
D1804	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q1201-05	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
Q1208	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1209	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1211-12	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1213-14	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
Q1217	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1301	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1302	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1303-04	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1342	DTC144ES-T	DIGI.TRANSISTOR		*
Q1343-44	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
Q1346	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1349	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1610	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
Q1613	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1701-04	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1752	2PA1015(YG)-T	SI.TRANSISTOR		*
Q1753	DTC124ES-T	DIGI.TRANSISTOR		*
Q1791-94	2PC1815(YG)-T	SI.TRANSISTOR		*
Q1801	2PA1015(YG)-T	SI.TRANSISTOR		*
IC				
IC1301	CXA1545AS	I.C(MONO-ANA)		
IC1303	TDA9143	I C		
IC1304	TDA4665	I.C(MONO-ANA)		*
IC1305	TDA4780	I.C(MONO-ANA)		
IC1311	AN77L05-Y	I.C(MONO-ANA)		*
IC1601	MSP3410B-PP-F7	I.C(DIGI-OTHER)		*
IC1701	M37207EFSP	I C		
IC1702	L78LR05E-MA	I.C(MONO-ANA)		*
IC1703	AT24C16-32WP2	I.C(EP-ROM)		*
IC1704	AT24C16-10PC	I.C(EP-ROM)		*
IC1751	SDA30C163	I.C(MICRO-COMP)		
IC1752	M27C1001-10F1	I.C(EP-ROM)		
IC1753	AT24C16-10PC	I.C(EP-ROM)		*
IC1754	SDA5275S	I.C.(MICRO-PROC)		
IC1755	MSM514400C60ZS	I.C(D-RAM)		
IC1756	TC4053BP	I.C(DIGI-MOS)		*
IC1757	MN1280-Q	I.C(DIGI-MOS)		*
OTHERS				
	QQR0490-001	NOISE FILTER	×3	
	CEMS009-064	I.C.SOCKET		
	CEMS007-008	I.C.SOCKET		
	CEMS006-068	IC SOCKET		
	CEMS007-032	IC SOCKET		
	CEMS007-008	I.C.SOCKET		
EF1001	CE41433-001Z	BEADS CORE		*
EF1610-12	CE42142-103Z	EMI FILTER		

⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
K1001	CE41433-001Z	BEADS CORE		*
K1003	CE41433-001Z	BEADS CORE		*
K1005	CE41492-001Z	CHOKE COIL		
K1009	CE41433-001Z	BEADS CORE		*
K1011	CE41433-001Z	BEADS CORE		*
K1013-14	CE41433-001Z	BEADS CORE		*
K1602	CE41433-001Z	BEADS CORE		*
K1701-02	CE41433-001Z	BEADS CORE		*
MD1	------------	100Hz PWB ASSY	(Refer to P56)	
MD2	------------	IF PWB ASSY	(Refer to P55)	
MD3	------------	SUB TEXT PB ASSY	(As follows)	
TU1001	CEEK481-A01	TUNER		
X1311	CE40749-001Z	CRYSTAL		*
X1312	CE40668-001Z	CRYSTAL		*
X1610	CE42546-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER. RESONATOR		*
X1751	QAX0307-001	CER. RESONATOR		
X1752	QAX0351-001Z	X TAL		*

SUB TEXT PW BOARD ASS'Y (SMB-1111B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1001	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
C1003	QCT25CH-270Z	C CAP.	27pF 50V J	*
C1005	QCT25CH-150Z	C CAP.	15pF 50V J	*
C1362	QCT25CH-270Z	C CAP.	27pF 50V J	*
C1701	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1702-04	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1705-07	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
COIL				
L1301	CELP027-390Z	PEAKING COIL	39μH	*
TRANSISTOR				
Q1347	2SK301(P)-T	F.E.T.		*
Q1701-03	2PC1815(YG)-T	SI. TRANSISTOR		*
IC				
IC1001	TC74AC00AP	IC		

IF PW BOARD ASS'Y(SMB0F701B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0103	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R0104	QRSA08J-121YL	CHIP MG R	120 Ω 1/10W J	*
R0105	QRSA08J-151YL	CHIP MG R	150 Ω 1/10W J	*
R0106	QRSA08J-181YL	CHIP MG R	180 Ω 1/10W J	*
R0107	QRSA08J-151YL	CHIP MG R	150 Ω 1/10W J	*
CAPACITOR				
C0020	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0022-25	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0026-27	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0030	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0040	NCT03CH-102AY	CHIP CAP.	1000pF 1600V H	*
C0041	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0042	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0043	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0044	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0046	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0047	QETN1CM-227Z	E CAP.	220μF 16V M	*
C0050	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0051	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0052	QAT3110-100A	TRIM CAP.	10pF 100V	
C0053	NCT03CH-6R0AY	CHIP CAP.	6pF 1600V H	*
C0054	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0055	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0056	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0057	NCT03CH-102AY	CHIP CAP.	1000pF 1600V H	*
C0058	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0059	QAT3110-100A	TRIM CAP.	10pF 100V	
C0060	NCT03CH-120AY	CHIP CAP.	12pF 1600V H	*
C0061	NCT03CH-7R0AY	CHIP CAP.	7pF 1600V H	*
C0062	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0063	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0064	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0065	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0067	NCT03CH-120AY	CHIP CAP.	12pF 1600V H	*
C0069-70	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C0071	QETN1HM-336Z	E CAP.	33μF 50V M	*
C0080-81	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C0101	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0102	NCT03CH-391AY	CHIP CAP.	390pF 1600V H	*
C0103	NCT03CH-121AY	CHIP CAP.	120pF 1600V H	*
C0104	NCT03CH-181AY	CHIP CAP.	180pF 1600V H	*
C0105	NCF21EZ-104AY	C CAP.	0.1μF 25V Z	*
C0140	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C0141	NCB21HK-332AY	CHIP CAP.	3300pF 50V K	*
C0142	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0143	QFLC1HJ-683MZ	M CAP.	0.068μF 50V Z	*
C0144	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C0145	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
C0601	QFLC1HJ-183MZ	M CAP.	0.018μF 50V J	*
C0602	QETN1CM-476Z	E CAP.	47μF 16V M	*
C0603	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0604	QETN1HM-105Z	E CAP.	1μF 50V M	*
C0605	QETN1CM-477Z	E CAP.	470μF 16V M	*
C0606	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
CF0010-11	FTP40.40MF	CERAMIC FILTER		*
TRANSFORMER				
T0020	QQR0626-001	I.F. TRANSF.		*
T0050	CELT001-307	C.WAVE TRANSF.		*
T0051	CELT001-306	C.WAVE TRANSF.		*
COIL				
L0020	CELP041-R47	PEAKING COIL	0.47μH	*
L0021	CE41131-1R5Y	INDUCTOR	1.5μH	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	COIL				
	L0030	CE41131-2R2Y	INDUCTOR	2.2µH	*
	L0040	CE41131-120Y	INDUCTOR	12µH	*
	L0041	CE41131-100Y	INDUCTOR	10µH	*
	L0050-53	CE41131-8R2Y	INDUCTOR	8.2µH	*
	L0070	CE41131-5R6Y	INDUCTOR	5.6µH	*
	L0071	CE41131-8R2Y	INDUCTOR	8.2µH	*
	L0101	CE41131-6R8Y	INDUCTOR	6.8µH	*
	L0102-03	CE41131-100Y	INDUCTOR	10µH	*
	L0104	CE41131-5R6Y	INDUCTOR	5.6µH	*
	DIODE				
	D0020-21	1SS85-T5	SI.DIODE		
	D0050-51	1SS85-T5	SI.DIODE		
	TRANSISTOR				
	Q0012	2SC5083(L-P)-T	SI.TRANSISTOR		*
	Q0080	2SC2712(YG)-X	SI.TRANSISTOR		*
	Q0101	2SC2712(YG)-X	SI.TRANSISTOR		*
	Q0102	2SA1162(YG)-X	SI.TRANSISTOR		*
	Q0103	DTC144EK-X	DIGI.TRANSISTOR		*
	Q0104	2SC2712(YG)-X	SI.TRANSISTOR		*
	Q0106	2SC2712(YG)-X	SI.TRANSISTOR		*
	Q0107	2SA1162(YG)-X	SI.TRANSISTOR		*
	Q0108	DTC144EK-X	DIGI.TRANSISTOR		*
	Q0109-11	2SC2712(YG)-X	SI.TRANSISTOR		*
	Q0120-26	DTC144EK-X	DIGI.TRANSISTOR		*
	Q0601-02	2SC2712(YG)-X	SI.TRANSISTOR		*
	IC				
	IC0010	TA8865BN	I.C(MONO-ANA)		
	OTHERS				
	CF0100	TPS5.5MW	CERAMIC FILTER		*
	CF0140	CSB503F30-T2	CER.RESONATOR		*
⚠	R0609	QRZ0054-470M	F R	47 Ω 1/4W J	*
	SF0010	QAX0316-001	SAW FILTER		*
	SF0011	CE42574-702	SAW FILTER		
	SF0012	CE42606-701	SAW FILTER		

100Hz PW BOARD ASS'Y(SMB0Z002B-U2)

This PW Board Ass'Y is included in the above MAIN PW Board Ass'Y.

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0302	NRVA02D-1502NY	M.F.R	15kΩ 1/10W J	
	R0303	NRVA02D-1102NY	CHIP MF R	11kΩ 1/10W J	
	CAPACITOR				
	C0001	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C0002	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0003	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C0004	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0005	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C0006	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0007	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C0008	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0009-10	QETN1AM-108Z	E CAP.	1000µF 10V M	*
	C0101	NCS21HJ-151AY	C CAP.	150pF 50V J	*
	C0102	NCT03CH-390AY	CHIP CAP.	39pF 1600V H	*
	C0103	NCS21HJ-271AY	CER.CAP.	270pF 50V J	*
	C0106	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0107	NCF21HZ-224AY	CHIP C CAP.	0.22µF 50V Z	
	C0108	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0109	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C0111	NCS21HJ-151AY	C CAP.	150pF 50V J	*
	C0112	NCT03CH-390AY	CHIP CAP.	39pF 1600V H	*
	C0113	NCS21HJ-271AY	CER.CAP.	270pF 50V J	*
	C0116	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0117	NCF21HZ-224AY	CHIP C CAP.	0.22µF 50V Z	
	C0118	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0121	NCS21HJ-151AY	C CAP.	150pF 50V J	*
	C0122	NCT03CH-390AY	CHIP CAP.	39pF 1600V H	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C0123	NCS21HJ-271AY	CER.CAP.	270pF 50V J	*
	C0126	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C0127	NCF21HZ-224AY	CHIP C CAP.	0.22µF 50V Z	
	C0128	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0131	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0132	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0133-34	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0135-36	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0137	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0138	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0139	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0142-47	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0148	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0149-54	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0155	NCT03CH-390AY	CHIP CAP.	39pF 1600V H	*
	C0201-06	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0207	NCB21HK-103AY	CHIP CAP.	0.01µF 50V K	*
	C0208-13	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0214	NCT03CH-100AY	CHIP CAP.	10pF 1600V H	*
	C0221-38	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0301	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0302	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0303	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0304	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0307-08	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0309	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C0310	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0311	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0313	NCS21HJ-152AY	CHIP C CAP.	1500pF 50V J	*
	C0314-18	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0321	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0322	NCF21HZ-224AY	CHIP C CAP.	0.22µF 50V Z	
	C0323	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0324	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C0331	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0332	NCF21HZ-224AY	CHIP C CAP.	0.22µF 50V Z	
	C0333	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0341	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C0342	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0343	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0401	NCB21HK-103AY	CHIP CAP.	0.01µF 50V K	*
	C0402	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0403	QETN0JM-227Z	E CAP.	220µF 6.3V M	*
	C0404	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0405	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C0406	NCF21EZ-104AY	C CAP.	0.1µF 50V Z	*
	C0407	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	C0408	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C0409-10	NCT03CH-270AY	CHIP CAP.	27pF 1600V H	*
	C0411	NCT03CH-180AY	CHIP CAP.	18pF 1600V H	*
	C0412-13	NCB21HK-103AY	CHIP CAP.	0.01µF 50V K	*
	C0415	NCF21EZ-104AY	C CAP.	0.1µF 25V Z	*
	COIL				
	L0001-02	CE40344-4R7YL	INDUCTOR	4.7µH	*
	L0003-04	CE40344-100YL	INDUCTOR	10µH	*
	L0005-07	CE40344-4R7YL	INDUCTOR	4.7µH	*
	L0101	CE41131-3R3Y	INDUCTOR	3.3µH	*
	L0111	CE41131-3R3Y	INDUCTOR	3.3µH	*
	L0121	CE41131-3R3Y	INDUCTOR	3.3µH	*
	L0301	CE41131-100Y	INDUCTOR	10µH	*
	L0401-02	CE40344-330YL	INDUCTOR	33µH	*
	DIODE				
	D0301	MA3051(L)-X	ZENER DIODE		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q0101	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0102	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0103	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0104	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0111	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0112	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0113	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0114	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0121	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0122	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0123	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0124	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0131	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0321	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0322	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0323	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0324	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0331	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0332	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0333	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0334	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0341	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0342	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0343	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0344-45	2SA1162(YG)-X	SI. TRANSISTOR		*
Q0351	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0361	2SC2712(YG)-X	SI. TRANSISTOR		*
Q0401	2SC2712(YG)-X	SI. TRANSISTOR		*
IC				
IC0101	SDA9205-2-W	I.C(DIGI-MOS)		*
IC0201	SDA9272	I.C(MICRO-COMP)		
IC0202	SDA9251-X	I.C(SAM)		*
IC0203-04	SDA9253	I.C(SAM)		
IC0301	SDA9280-W	I.C(DIGI-OTHER)		*
IC0401	SDA9257	I.C(DIGI-OTHER)		
IC0402	MC74F04M-X	IC		
OTHERS				
DL0321	NQR0241-001X	L.P.F		*
DL0331	NQR0241-001X	L.P.F		*
DL0341	NQR0242-001X	L.P.F		*
EF0001-05	CE42482-103Y	EMI FILTER		*
EF0006	CE42482-470Y	EMI FILTER		*
EF0101	CE42482-470Y	EMI FILTER		*
EF0111	CE42482-470Y	EMI FILTER		*
EF0121	CE42482-470Y	EMI FILTER		*
EF0321	CE42482-470Y	EMI FILTER		*
EF0331	CE42482-470Y	EMI FILTER		*
EF0341-42	CE42482-470Y	EMI FILTER		*
EF0351	CE42482-470Y	EMI FILTER		*
EF0361	CE42482-470Y	EMI FILTER		*
K0001	CE41433-001Z	BEADS CORE		*
X0401	QAX0350-001	X TAL		

POWER DEF PW BOARD ASS'Y (SMB-2003B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R2409	QRX019J-1R0S	MF R	1 Ω 1W J	*
R2411	QRG029J-221	OM R	220 Ω 2W J	
R2412-13	QRX019J-1R8S	MF R	1.8 Ω 1W J	*
R2418	QRV141F-6802AY	MF R	68kΩ 1/4W F	
R2419	QRV141F-7870AY	MF R	787 Ω 1/4W F	
R2421	QRV141F-1003AY	MF R	100kΩ 1/4W F	
R2422	QRV141F-1501AY	MF R	1.5kΩ 1/4W F	
R2508	QRV141F-2002AY	MF R	20kΩ 1/4W F	
R2509	QRV141F-4701AY	MF R	4.7kΩ 1/4W F	
R2516	QRG039J-272	OM R	2.7kΩ 3W J	
R2517	QRG039J-122	OM R	1.2kΩ 3W J	
R2533	QRX039J-5R6	MF R	5.6 Ω 3W J	
R2571	QRG029J-223	OM R	22kΩ 2W J	*
R2581	QRF104J-100	UNF R	10 Ω 10W J	*
R2902	QRF154K-4R7	UNF R	4.7 Ω 15W K	*
R2905	QRG039J-333	OM R	33kΩ 3W J	*
R2907	QRM059J-R22	MP R	0.22 Ω 5W J	*
R2910	QRG039J-393	OM R	39kΩ 3W J	
R2951	QRF074J-102	UNF R	1kΩ 7W J	*
R2952	QRG029J-123	OM R	12kΩ 2W J	*
R2953	QRX039J-5R6	MF R	5.6 Ω 3W J	
R2962-63	QRG019J-220S	OM R	22 Ω 1W J	*
⚠ R2991	QRZ0057-825	C R	8.2MΩ 1W J	*
CAPACITOR				
C2401	QFLC2AJ-104MZ	M CAP.	0.1 μF 100V J	*
C2402	QETC1VM-337Z	E CAP.	330 μF 35V M	*
C2403	QFV71HJ-104MZ	TF CAP.	0.1 μF 50V J	
C2405	QFV71HJ-474MZ	TF CAP.	0.47 μF 50V J	*
C2406	QFLC2AJ-104MZ	M CAP.	0.1 μF 100V J	*
C2407	QFLC2AK-223MZ	M CAP.	0.022 μF 100V K	*
C2410	QFV71HJ-474MZ	TF CAP.	0.47 μF 50V J	*
C2411	QETN1HM-226Z	E CAP.	22 μF 50V M	*
C2412	QETM1VM-108	E CAP.	1000 μF 35V M	*
C2415	QCT25CH-470Z	C CAP.	47 pF 50V J	*
C2501	QFV71HJ-124MZ	TF CAP.	0.12 μF 50V J	*
C2502	QETN1CM-108Z	E CAP.	1000 μF 16V M	*
C2503	QETN2AM-106Z	E CAP.	10 μF 100V M	*
C2504	QETN1AM-227Z	E CAP.	220 μF 10V M	*
C2505	QFLC2AJ-102MZ	M CAP.	1000 pF 100V J	*
C2507	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V J	*
C2508	QFM72DK-103M	M CAP.	0.01 μF 200V K	*
C2509	QETN1AM-227Z	E CAP.	220 μF 10V M	*
C2520	QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	*
C2521	QFZ0117-1701S	MPP CAP.	1.7 μF 2000V±2.5%	
C2522	QFZ0117-4701S	MPP CAP.	4700 pF 2000V±2.5%	
C2523	QFM72DK-683M	M CAP.	0.068 μF 200V K	*
C2525	QFZ0117-4701S	MPP CAP.	4700 pF 2000V±2.5%	
C2526	QFZ0119-684S	MPP CAP.	0.68 μF 200V J	*
C2527	QFZ0119-514S	MPP CAP.	0.51 μF 200V J	*
C2528	QFZ0128-404S	MPP CAP.	0.4 μF 400V ±3%	
C2529	QFZ0128-204S	MPP CAP.	0.2 μH 400V ±3%	
C2533	QFZ0194-534	MPP CAP.	0.53 μF 250V J	
C2536	QFZ0119-534S	MPP CAP.	0.53 μF 200V ±3%	*
C2537	QETM2CM-227	E CAP.	220 μF 160V M	*
C2541	QEZ0195-475MZ	E CAP.	4.7 μF 50V M	*
C2544	QETN1EM-476Z	E CAP.	47 μF 25V M	*
C2545	QETN1AM-107Z	E CAP.	100 μF 10V M	*
C2546	QFLC1HK-104MZ	M CAP.	0.1 μF 50V K	*
C2551	QEN61HM-105Z	BP E CAP.	1 μF 50V M	*
C2554	QETN2EM-106Z	E CAP.	10 μF 250V M	*
C2555-56	QETN1EM-108Z	E CAP.	1000 μF 25V M	*
C2561	QCZ0122-681A	C CAP.	680 pF 2000V K	
C2581	QETC0JM-107Z	E CAP.	100 μF 6.3V M	*
C2582	QETN1CM-476Z	E CAP.	47 μF 16V M	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
⚠	C2902	QFZ9040-473N	MM CAP.	0.47µF 400V M	*
	C2903	QCZ9034-472A	C CAP.	0.047µF 400V P	*
	C2904-05	QCZ9034-472A	C CAP.	4700pF 400V P	*
	C2906	QEZ0199-227M	E CAP.	220µF	
	C2908	QCZ0122-151A	C CAP.	150pF 2000V K	*
	C2909	QCZ0122-221A	C CAP.	220pF 2000V K	*
	C2910	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2913	QETC1EM-477Z	E CAP.	470µF 25V M	*
	C2914	QFLC1HK-104MZ	M CAP.	0.1µF 50V K	*
	C2916	QFLC1HJ-102MZ	M CAP.	1000pF 50V J	*
	C2919	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C2920	QFLC1HJ-472MZ	M CAP.	4700pF 50V J	*
	C2951	QEZ0203-227	E CAP.	200µF 160V M	
	C2952	QEHC1CM-108MZ	E CAP.	1000µF 16V M	*
	C2953	QEHB1CM-108M	E CAP.	1000µF 16V M	*
	C2954	QEZ0106-228R	E CAP.	2200µF 10V M	
	C2966-68	QCZ0120-104MZ	C CAP.	0.1µF 25V Z	*
	C2970	QEHC1HM-336MZ	E CAP.	33µF 50V M	*
	C2971	QEHC1CM-107MZ	E CAP.	100µF 16V M	*
	C2972	QETN1AM-228Z	E CAP.	2200µF 10V M	*
	C2973	QEHC1AM-227MZ	E CAP.	220µF 10V M	*
	C2975	QEHB1CM-228M	E CAP.	2200µF 16V M	*
	C2976	QEZ0106-228R	E CAP.	2200µF 10V M	
	C2977	QEHC1AM-107MZ	E CAP.	100µF 10V M	*
	C2978	QCZ0122-151A	C CAP.	150pF 2000V K	*
	C2981	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2982-83	QETN1HM-106Z	E CAP.	10µF 50V M	*
⚠	C2991	QCZ9041-471A	C CAP.	470pF 400V K	*
⚠	C2992	QCZ9041-332A	C CAP.	330pF 400V M	*
	TRANSFORMER				
	T2501	CE42672-001	DRIVE TRANSF		*
	T2521	QQR0706-001	PINC. TRANSF.		*
⚠	T2551	CETH021-00AJ1	H.V.T(SERVICE)		*
	T2561	CE42692-001J1	DAF TRANSF.		*
⚠	T2901	CETS089-001J4	SWITCH. TRANSF.		*
	T2981	QQT0147-001	POWER TRANSF.		*
	COIL				
	L2521	QQR0707-002	LINEARITY COIL		*
	L2541	QQR0705-001	CHOKE COIL		*
	L2551	CELC901-056J6	HEATER CHOKE		*
	L2901-02	CELC055-100	CHOKE COIL	10µH	*
	L2903	CELC005-2R5J7	CHOKE COIL	2.5µH	*
	L2951	CELC901-046J6	HEATER CHOKE		*
	L2952-53	CELC057-5R6Z	CHOKE COIL	5.6µH	
	DIODE				
	D2401	MTZJ75-T2	ZENER DIODE		*
	D2402	BYD33D-T3	SI.DIODE		*
	D2403	1SS133-T2	SI.DIODE		*
	D2404	MTZJ7.5S-T2	ZENER DIODE		*
	D2405	1SS133-T2	SI.DIODE		*
	D2406-09	MA700A-T2	SI.DIODE		*
	D2410	1SS133-T2	SI.DIODE		*
	D2411	MTZJ22(B)-T2	ZENER DIODE		*
	D2501	BYD33G-T3	SI.DIODE		*
	D2502	MTZJ7.5S-T2	ZENER DIODE		*
	D2504	1SS133-T2	SI.DIODE		*
	D2505	MTZJ6.8(A)-T2	ZENER DIODE		*
	D2506	1SS146-T2	SI.DIODE		*
	D2507	1SS81-T5	SI.DIODE		*
	D2508	1SS133-T2	SI.DIODE		
	D2521	FMV-3FU-C1	SI.DIODE		
	D2525	V11CA-C1	SI.DIODE		
	D2541	MTZJ6.8(C)-T2	ZENER DIODE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D2542	1SS133-T2	SI.DIODE		*
	D2550-51	BYD33G-T3	SI.DIODE		*
	D2552-53	BYW95B-20	SI.DIODE		*
	D2556	BYD33G-T3	SI.DIODE		*
	D2571	MTZJ33(B)-T2	ZENER DIODE		*
	D2581	MTZJ15(B)-T2	ZENER DIODE		*
	D2582	MTZJ7.5(B)-T2	ZENER DIODE		*
	D2585	1SS133-T2	SI.DIODE		*
	D2901	D3SB60	BRIDGE DIODE		
	D2902	BYD33M-T3	SI.DIODE		*
	D2903	1SR124-400A-T2	SI.DIODE		*
	D2904-05	BYD33D-T3	SI.DIODE		*
	D2951-52	RU4C-C1	SI.DIODE		
	D2953	BYD33M-T3	SI.DIODE		*
	D2954-55	BYW95B-20	SI.DIODE		*
	D2956	SF6L20U	SI.DIODE		
	D2958-59	SF6L20U	SI.DIODE		
	D2960	MTZJ5.1(A)-T2	ZENER DIODE		*
	D2961	MTZJ5.6(A)-T2	ZENER DIODE		*
	D2962-66	1SS133-T2	SI.DIODE		*
	D2968	1SS133-T2	SI.DIODE		*
	D2970	1SS133-T2	SI.DIODE		*
	D2981-84	1N4003-T2	SI.DIODE		*
	D2985	1SS133-T2	SI.DIODE		*
	D2986	MTZJ8.2(B)-T2	ZENER DIODE		*
	D2987	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		
	Q2403	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q2404	DTC144ESA-T	DIGI.TRANSISTOR		
	Q2405-06	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q2501	BSN274	F.E.T.		*
	Q2505	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q2506	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q2521	2SC5406-RL	SI.TRANSISTOR		*
	Q2523	IRF640	F.E.T.		
	Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q2541	2SD1408(OY)-LB	SI.TRANSISTOR		
	Q2551	DTA124ESA-T	DIGI.TRANSISTOR		
	Q2552	DTC144ESA-T	DIGI.TRANSISTOR		
	Q2581	2SA949(Y)C1	SI.TRANSISTOR		*
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR		
	Q2901	2SK2148-C1	F.E.T.		
	Q2955	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q2981	2SC2655(Y)-T	SI.TRANSISTOR		*
	Q2982	2PC1815(YG)-T	SI.TRANSISTOR		*
	IC				
	IC2401	LA7841	I.C(MONO-ANA)		
	IC2501	TDA9151B	I.C(DEF-PRO)		*
	IC2541	UPC4558C	I.C(MONO-ANA)		
	IC2901	MC44603P	I.C(MONO-ANA)		*
	IC2951	SE135N	I.C(HYBRID)		*
	IC2952	LM2940CT-12	I.C(MONO-ANA)		
	IC2953	UPC2409AHF	I.C(MONO-ANA)		
	IC2954	KIA7808PI	I.C(MONO-ANA)		*
	IC2955-56	PQ05RF21	I.C(MONO-ANA)		
	IC2957	KIA7808PI	I.C(MONO-ANA)		*
	OTHERS				
⚠	FR2551	QRH017J-1R0M	F R	1 Ω 1W J	*
⚠	FR2552	QRH017J-1R0M	F R	1 Ω 1W J	*
⚠	FR2553	QRZ0054-4R7M	F R	4.7 Ω 1/4W J	*
	K2402	CE41433-001Z	BEADS CORE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	K2502-05	QQR0679-001	FERRITE BEADS		
	K2506	CE41433-001Z	BEADS CORE		*
	K2901-04	CE42050-001Z	CORE		*
	K2951	CE41433-001Z	BEADS CORE		*
	PC2521	TLP621(B)	I.C(PH. COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C(PH. COUPLER)		*
	RY2981	CESK028-002	RELAY		*
	TH2901	CEKP002-003	W.P.THERMISTOR		*
	VA2561	ERZV10V112C1	VARISTOR		*

CRT SOCKET PW BOARD ASS'Y (SMB-3001B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3106	QRD14CJ-100SX	C R	10 Ω 1/4W J	
	R3119	QRG029J-391A	OM R	390 Ω 2W J	*
	R3229-31	QRG019J-823S	OM R	82kΩ 1W J	
	CAPACITOR				
	C3101	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3102	QFLC1HK-103MZ	M CAP.	0.01μF 50V K	*
	C3103	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C3104	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3107	QETC2CM-106Z	E CAP.	10μF 160V M	*
	C3110	QETC2CM-106Z	E CAP.	10μF 160V M	*
	C3111	QETC0JM-107Z	E CAP.	100μF 6.3V M	*
	C3118	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3204-09	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
	C3210-12	QFH62EK-104MZ	MM CAP.	0.1μF 250V K	*
	C3218	QETM2EM-336	E CAP.	33μF 250V M	*
	C3219	QFZ0097-223M	M M CAP.	0.022μF 1250V K	*
	C3221	QETC2EM-106Z	E CAP.	10μF 250V M	*
	C3301	QETN1CM-107Z	E CAP.	100μF 16V M	*
	COIL				
	L3101	CELP026-150Z	PEAKING COIL	15μH	*
	L3201-03	CELP026-4R7Z	PEAKING COIL	4.7μH	*
	DIODE				
	D3101-02	RH1S-T3	SI.DIODE		*
	D3103	MA165-T2	SI.DIODE		*
	D3151	1SS133-T2	SI.DIODE		*
	D3204-06	EU01N-T2	SI.DIODE		
	D3301	1SS252-T2	SI.DIODE		*
	D3302-03	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q3101	2SA1309A(QR)-T	SI.TRANSISTOR		*
	Q3102-03	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q3104	2SA1309A(QR)-T	SI.TRANSISTOR		*
	Q3105	2SA1837	SI.TRANSISTOR		
	Q3106	2SC4793	SI.TRANSISTOR		
	Q3107	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q3108	2SC1906-T	SI.TRANSISTOR		*
	Q3301	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q3302	2SC2655(Y)-T	SI.TRANSISTOR		*
	Q3303	2PA1015(YG)-T	SI.TRANSISTOR		*
	IC				
	IC3201-03	TDA6111Q	I.C(MONO-ANA)		
	OTHERS				
	K3101-04	CE41492-001Z	CHOKE COIL		
⚠	R3109	QRH017J-561M	F R	560 Ω 1W J	*
⚠	SK3001	CE42670-001	C.R.T.SOCKET		

AUDIO PW BOARD ASS'Y (SMB-6001B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C6101	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6102-03	QETM1EM-228	E CAP.	2200μF 25V M	*
	C6105	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C6106	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C6108	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6109-10	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C6112	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C6113	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C6115-16	QFV71HJ-684MZ	TF CAP.	0.68μF 50V J	*
	C6117-18	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C6121	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
	DIODE				
	D6101-04	MTZJ27(B)-T2	ZENER DIODE		*
	D6105	MTZJ5.1(B)-T2	ZENER DIODE		*
	D6107	1SS133-T2	SI.DIODE		*
	D6108	MA700-T2	SI.DIODE		*
	D6112	1SS133-T2	SI.DIODE		*
	D6115	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q6101	DTC144ESA-T	DIGI.TRANSISTOR		
	Q6102	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q6104	2PA1015(YG)-T	SI.TRANSISTOR		*
	Q6105	DTC144ESA-T	DIGI.TRANSISTOR		
	Q6106-07	DTC323TS-T	DIGI.TRANSISTOR		*
	IC				
	IC6101-02	TDA2052V	I.C(MONO-ANA)		*
	OTHERS				
	K6001-02	CE41433-001Z	BEADS CORE		*

FRONT CONTROL PW BOARD ASS'Y (SMB-8002B-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C8003	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8004	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
	C8005	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8009	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8012	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8013-14	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C8017-18	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8020-21	QCZ0120-104MZ	C CAP.	0.1μF 25V Z	*
⚠	C8901	QFZ9040-474N	MF CAP.	0.47μF	*
	COIL				
	L8001	CE41832-001	LEAD CORE		*
	L8002-03	CELP017-5R6Y	PEAKING COIL	5.6μH	*
	L8010-11	CELP017-270Y	PEAKING COIL	27μH	*
	L8012	CE41832-001	LEAD CORE		*
	DIODE				
	D8007	P1201	C.D.S.		*
	D8008	1SS133-T2	SI.DIODE		*
	D8009	SLR-342MG-T16	L.E.D.(GRN)	ECO	*
	D8010	SPR-39MVWF	L.E.D.	POWER	*
	D8011	1SS133-T2	SI.DIODE		*
	D8012	SLR-342DU-T16	L.E.D.(ORG)	TIMER	*
	D8013	SLR-342YY-T16	L.E.D.(YLW)	3D-PHONIC	*
	D8014	MTZJ6.8(A)-T2	ZENER DIODE		*
	D8015-16	MTZJ15(C)-T2	ZENER DIODE		*
	D8017	MTZJ6.2(B)-T2	ZENER DIODE		*
	D8018	MTZJ5.1(B)-T2	ZENER DIODE		*
	TRANSISTOR				
	Q8001	2PC1815(YG)-T	SI.TRANSISTOR		*
	Q8002	DTC144ES-T	DIGI.TRANSISTOR		*
	Q8003-04	DTA144ESA-T	DIGI.TRANSISTOR		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC				
IC8001	GP1U281Q	IFR DETECT UNIT		*
IC8002	BA4558	I.C(MONO-ANA)		*
OTHERS				
	CEMG002-001Z	FUSE CLIP		*
	CM36548-001-E	L.E.D. HOLDER		*
	CM35921-A04-H	CDS HOLDER		
⚠ F8901	QMF51D2-3R15J1	FUSE	3.15A	*
J8001	QMS3007-C01	JACK	HEADPHONE	
J8004	CEMN011-001	JACK	V4IN	*
J8005	CEMN011-002	JACK	L4IN	*
J8006	CEMN011-003	JACK	R4IN	*
⚠ LF8901	CELF012-001J7	LINE FILTER		*
⚠ LF8902	CELF012-001J7	LINE FILTER		*
S8001	CESP001-001	PUSH SWITCH	CH UP/DOWN	
S8002	CESP001-001	PUSH SWITCH	MENU	
⚠ S8901	QSP4K21-C01	PUSH SWITCH	MAIN POWER	*

DOLBY PW BOARD ASS'Y (SMB0D002B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0101	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0102	NCT03CH-680AY	CHIP CAP.	68 pF 1600V H	*
C0103	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0104	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0105	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	*
C0106	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0107	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0108	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0109	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0110	NCT03CH-680AY	CHIP CAP.	68 pF 1600V H	*
C0111	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0112-13	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0115	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0116-25	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0126	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0127-28	NCT03CH-220AY	CHIP CAP.	22 pF 1600V H	*
C0129	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0130	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0131	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0132	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0133	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0134	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0135	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0136	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0137-38	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0139	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0140	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0141	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	*
C0142	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0143	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0144	QETN1CM-227Z	E CAP.	220 μF 16V M	*
C0145	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0146	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0147-53	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0201	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0202	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	*
C0203	NCB21HK-182AY	CHIP CAP.	1800 pF 50V K	*
C0204	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0205	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0206	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	*
C0207	NCB21HK-182AY	CHIP CAP.	1800 pF 50V K	*
C0208	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0209	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0210	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0211	NCB21HK-182AY	CHIP CAP.	1800 pF 50V K	*
C0212	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0213	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0214	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0215	NCB21HK-182AY	CHIP CAP.	1800 pF 50V K	*
C0216	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0217	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	*
C0218-21	NCT03CH-470AY	CHIP CAP.	47 pF 1600V H	*
C0305	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0401	QETN1HM-226Z	E CAP.	22 μF 50V M	*
C0402	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0403-04	NCB21HK-272AY	CHIP CAP.	2700 pF 50V K	*
C0405-06	QETN1HM-225Z	E CAP.	2.2 μF 50V M	*
C0407-10	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0431	QETN1HM-226Z	E CAP.	22 μF 50V M	*
C0432	QETN1CM-477Z	E CAP.	470 μF 16V M	*
C0433-34	NCB21HK-272AY	CHIP CAP.	2700 pF 50V K	*
C0435	QETN1HM-225Z	E CAP.	2.2 μF 50V M	*
C0436-39	NCF21EZ-104AY	C CAP.	0.1 μF 25V Z	*
C0440	QETN1HM-225Z	E CAP.	2.2 μF 50V M	*
C0451	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0452	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0453	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0454	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0456	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0457	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0458	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	*
C0459	QETN1CM-107Z	E CAP.	100 μF 16V M	*
C0460	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C0461	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0462	NCF21CZ-105AY	CER.CAP.	0.01 μF 16V Z	*
C0465	NCF21CZ-105AY	CER.CAP.	0.01 μF 16V Z	*
C0501-02	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0503-04	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0505	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0507-08	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0531	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0532	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0536	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0551	NCF21CZ-105AY	C CAP.	1 μF 16V Z	*
C0553	NCT03CH-100AY	CHIP CAP.	10 pF 1600V H	*
C0555	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0556	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0557	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0601-02	QETN1HM-106Z	E CAP.	10 μF 50V M	*
C0603-04	QETN1CM-476Z	E CAP.	47 μF 16V M	*
C0701-05	NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
COIL				
L0101-04	CE40344-4R7YL	INDUCTOR	4.7 μH	*
L0701-05	CE40344-100YL	INDUCTOR	10 μH	*
L0706	CE41433-001Z	BEADS CORE		*
DIODE				
D0103	MA3062(M)-X	ZENER DIODE		*
D0201	MA3062(M)-X	ZENER DIODE		*
D0451	MA141WK-X	SI.DIODE		*
D0452	MA3062(M)-X	ZENER DIODE		*
D0453	MA141WK-X	SI.DIODE		
D0454	MA3062(M)-X	ZENER DIODE		*
D0501-02	MA3150(M)-X	ZENER DIODE		*
D0503	MA3062-X	ZENER DIODE		*
D0532	MA3150(M)-X	ZENER DIODE		*
D0552	MA3150(M)-X	ZENER DIODE		*
TRANSISTOR				
Q0302	DTC144EK-X	DIGI.TRANSISTOR		*
Q0451-52	DTC323TK-X	DIGI.TRANSISTOR		*
Q0453	DTC144EK-X	DIGI.TRANSISTOR		*
Q0501	2SA1162(YG)-X	SI.TRANSISTOR		*
Q0502-03	DTC323TK-X	DIGI.TRANSISTOR		*
Q0531	2SA1162(YG)-X	SI.TRANSISTOR		*
Q0532	DTC323TK-X	DIGI.TRANSISTOR		*
Q0551	2SA1162(YG)-X	SI.TRANSISTOR		*
Q0553	DTC323TK-X	DIGI.TRANSISTOR		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
I C				
IC0101	SAA7367T-X	I. C (DIGI-MOS)		
IC0102	TMS57052BFT	I. C (M)		
IC0103	LC32464M-80X	I. C (D-RAM)		
IC0104-05	PCM1717E-X	I. C (MONO-ANA)		
IC0111	BA4558F-X	I. C (MONO-ANA)		
IC0201-02	UPC324G2-X	I. C (MONO-ANA)		
IC0301	TC4052BF-X	I. C (DIGI-MOS)		
IC0401	TDA7315D	I. C (DIGI-OTHER)		
IC0431	TDA7315D	I. C (DIGI-OTHER)		
IC0451-52	BA4558F-X	I. C (MONO-ANA)		
IC0501	BA4558F-X	I. C (MONO-ANA)		
IC0551	BA4558F-X	I. C (MONO-ANA)		
OTHERS				
EF0101-05	CE42482-103Y	EMI FILTER		*
J0001	CEMN036-004	PIN JACK		
J0002	CEMN061-001	PIN JACK		
K0101-02	CE42681-001Y	BEADS CORE		
K0104-07	CE42681-001Y	BEADS CORE		
K0108	CE41433-001Z	BEADS CORE		*
X0101	NAX0001-001X	CRYSTAL		

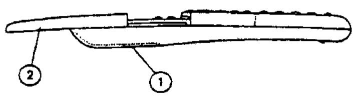
AV TERMINAL PW BOARD ASS'Y (SMB0J001B-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0102-04	QEKC1CM-106GMZ	E CAP.	10μF 16V M	
C0301	QEKC1CM-476MZ	E CAP.	47μF 16V M	*
COIL				
L0101-04	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0105	CE41832-001	LEAD CORE		*
L0201-04	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0205	CE41832-001	LEAD CORE		*
L0301-02	CELP017-5R6Y	PEAKING COIL	5.6μH	*
L0303	CE41832-001	LEAD CORE		*
OTHERS				
J0001-03	CE40529-006	SCART CONNECTOR		

AUTO ASPECT MODULE PW BOARD ASS'Y (SJF0W001A(U))

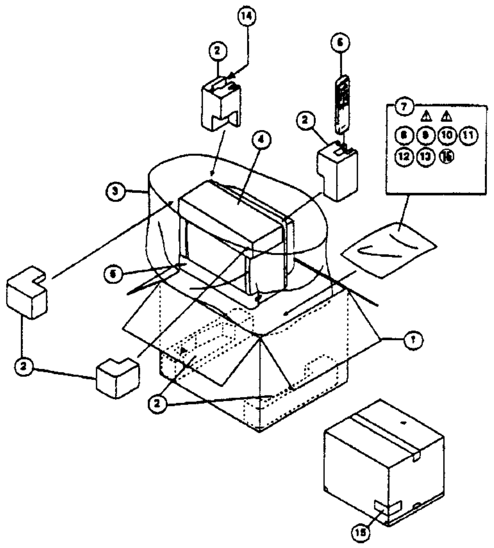
⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
	SJF0W001A (U)	AUTO ASPECT MODULE		

REMOTE CONTROL UNIT PARTS LIST (RM-C793-1E) [28"/32"]



⚠ Ref. No.	Part No.	Part Name.	Description	Local
1	BGV110201A	BATTERY COVER		*
2	BGV110307A	SLIDE COVER		*

PACKING



PACKING PARTS LIST

AV-28WZ2EN(A)/AV-28WZ2EP(A)

⚠ Ref. No.	Part No.	Part Name	Description	Local
1	AEM1002-A44-E	PACKING CASE		*
2	CP11547-00B-E	PACKING CUSHION		*
3	AEM1004-A06-E	SET COVER		*
4	CP40193-009-E	CUSHION SHEET		*
5	CP40193-010-E	CUSHION SHEET		*
6	RM-C793-1E	REMOCON UNIT		*
7	AEM3021-001-E	POLY BAG		*
8	BT-20066A-E	ADDRESS CARD		*
⚠ 9	CQ40353-001-E	INST. BOOK		*
⚠ 10	CQ40352-001-E	INST. BOOK		*
11	BT-54008-1E	WARRANTY CARD		*
12	CM22966-008-E	DEC. SHEET		*
13	LCT0065-001A-U	WARNING SHEET		*
14	AEEAK001-200	RF CABLE		*
15	AEM1038-058-E	EURO LABEL		*
16	2832WZ2ENA-HSAE	S. DIAGRAM	AV-28WZ2EN (A) ONLY	*

AV-32WZ2EN(A)/AV-32WZ2EP(A)

⚠ Ref. No.	Part No.	Part Name	Description	Local
1	AEM1002-A43-E	PACKING CASE		*
2	CP11549-00B-E	PACKING CUSHION		*
3	AEM1004-A07-E	SET COVER		*
4	AEM3022-003-E	CUSHION SHEET		*
5	CP40193-010-E	CUSHION SHEET		*
6	RM-C793-1E	REMOCON UNIT		*
7	AEM3021-001-E	POLY BAG		*
8	BT-20066A-E	ADDRESS CARD		*
⚠ 9	CQ40353-001-E	INST. BOOK		*
⚠ 10	CQ40352-001-E	INST. BOOK		*
11	BT-54008-1E	WARRANTY CARD		*
12	CM22966-014-E	DEC. SHEET		*
13	LCT0065-001A-U	WARNING SHEET		*
14	AEEAK001-200	RF CABLE		*
15	AEM1038-060-E	EURO LABEL		*
16	2832WZ2ENA-HSAE	S. DIAGRAM	AV-32WZ2EN (A) ONLY	*

AV-32WZ2EN(A)/AV-32WZ2EP(A)
AV-28WZ2EN(A)/AV-28WZ2EP(A)
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal :PAL Colour bar signal
(2)Setting, positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments. use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●in the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value
No unit :[Ω]
K :[KΩ]
M :[MΩ]

●Rated allowable power
No indication :1/6[W]
Others :As specified

●Type
No indication :Carbon resistor
OMR :Oxide metal film resistor
MFR :Metal film resistor
MPR :Metal plate resistor
UNFR :Uninflammble resistor
FR :Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value
1 or higher :[pF]
less than 1 :[μF]

●Withstand voltage
No indication :DC50[V]
Others :DC withstand voltage [V]

*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

●Type
No indication :Ceramic capacitor
MY :Mylar capacitor
MM :Metalized mylar capacitor
PP :Polypropylene capacitor
MPP :Metalized polypropylene capacitor
MF :Metalized film capacitor
TF :Thin film capacitor
BP :Bipolar electrolytic capacitor
TAN :Tantalum capacitor

(3)Coils
No unit :[μH]
Others :As specified

(4)Power Supply
━━━━ :B1
■■■■ :B2(12V)
■□■□ :9V
□□□□ :5V

*Respective voltage values are indicated

(5)Test point
⊙ :Test point
○ :Only test point display

(6)Connecting method
□ :Connector
○ :Wrapping or soldering
→>— →|— :Receptacle

(7)Ground symbol
⊥ :LIVE side ground
⊥ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

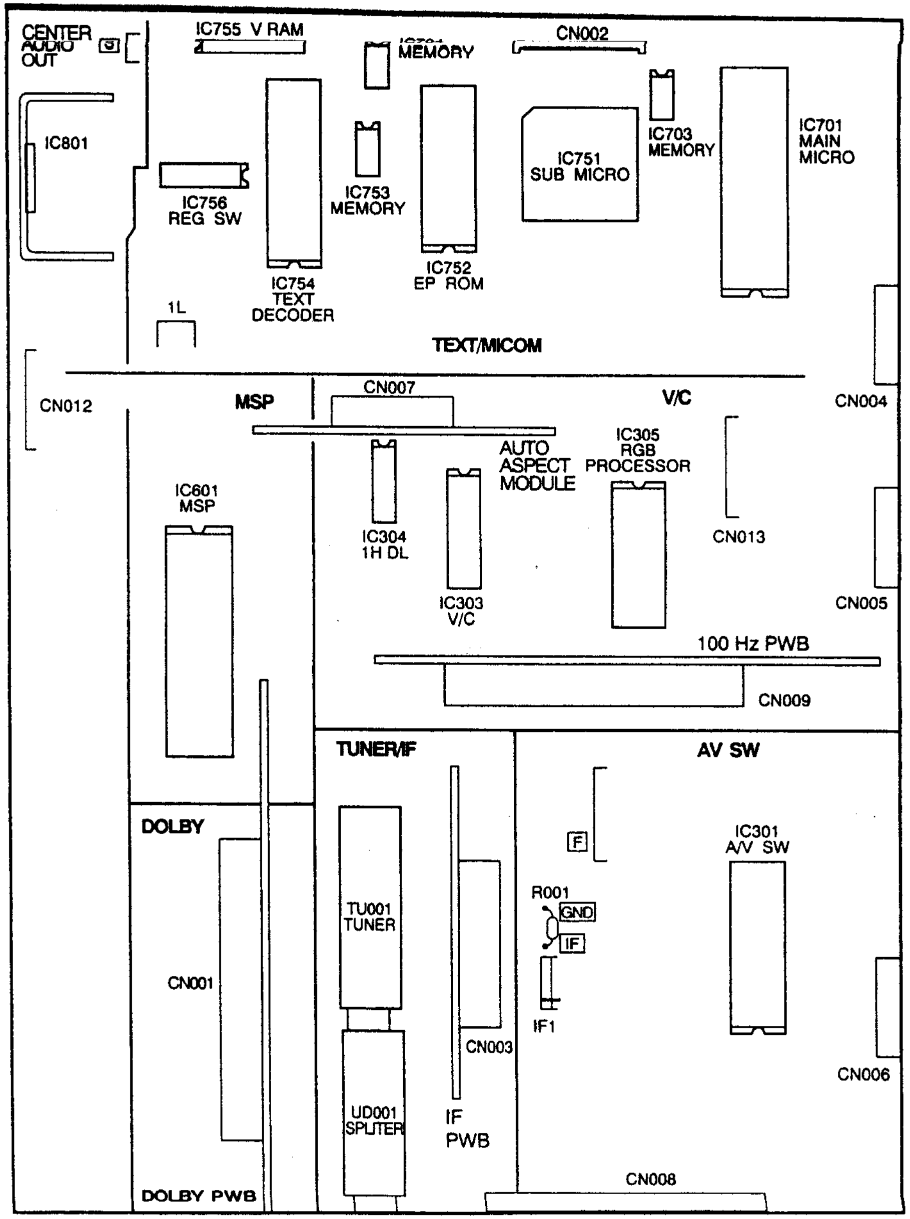
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⊥) side GND. Therefore, care must be taken for the following points.

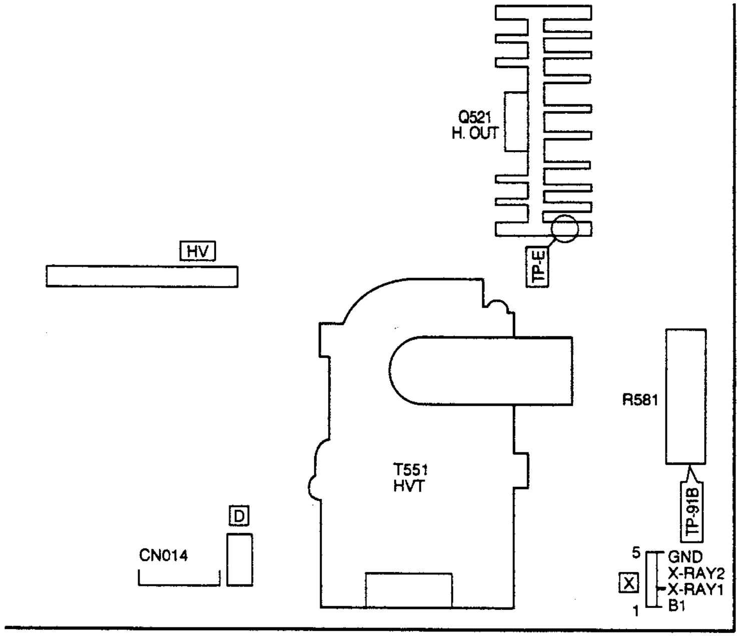
(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

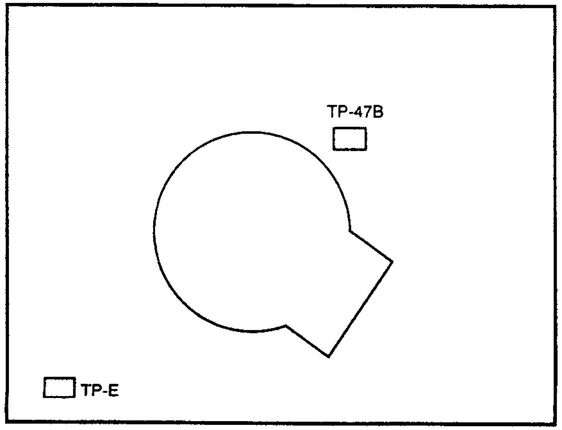
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

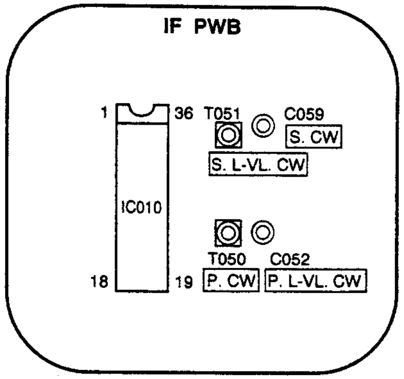
⚠Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

【 MAIN PARTS LOCATION AND ALIGNMENTS LOCATION】

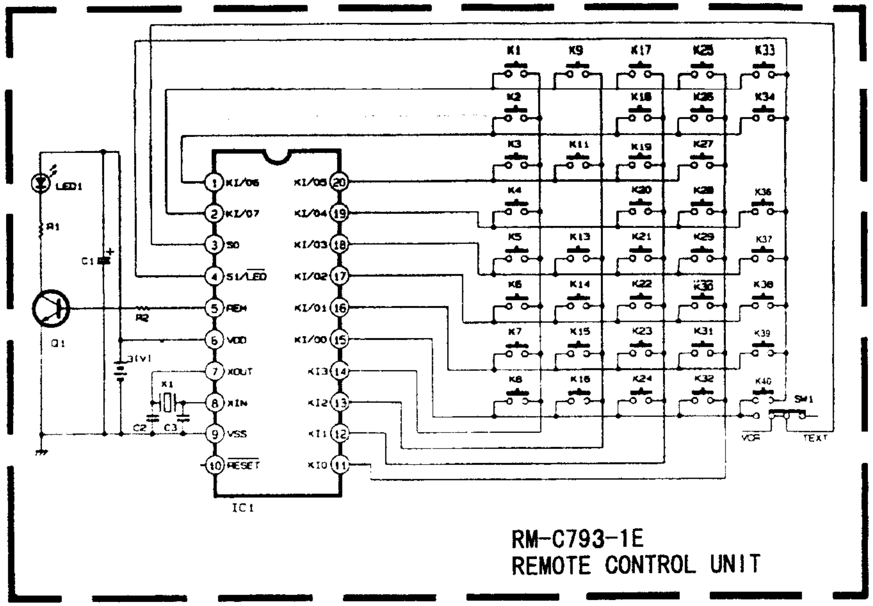

CENTER AUDIO OUT
IC755 V RAM
MEMORY
CN002
IC801
IC756 REG SW
IC753 MEMORY
IC751 SUB MICRO
IC703 MEMORY
IC701 MAIN MICRO
IC754 TEXT DECODER
IC752 EP ROM
1L
TEXT/MICOM
CN012
MSP
CN007
V/C
CN004
IC305 RGB PROCESSOR
AUTO ASPECT MODULE
IC601 MSP
IC304 1H DL
IC303 V/C
CN013
CN005
100 Hz PWB
CN009
DOLBY
TUNER/IF
AV SW
F
IC301 A/V SW
R001
GND
IF
IF1
TU001 TUNER
CN001
CN003
UD001 SPLITER
IF PWB
CN006
CN008
DOLBY PWB


Q521
H. OUT
TP-E
HV
R581
T551
HVT
TP-91B
D
CN014
5
1
X
GND
X-RAY2
X-RAY1
B1


TP-47B
TP-E


IF PWB
1
36
T051
C059
S. CW
S. L-VL. CW
IC010
T050
C052
18
19
P. CW
P. L-VL. CW

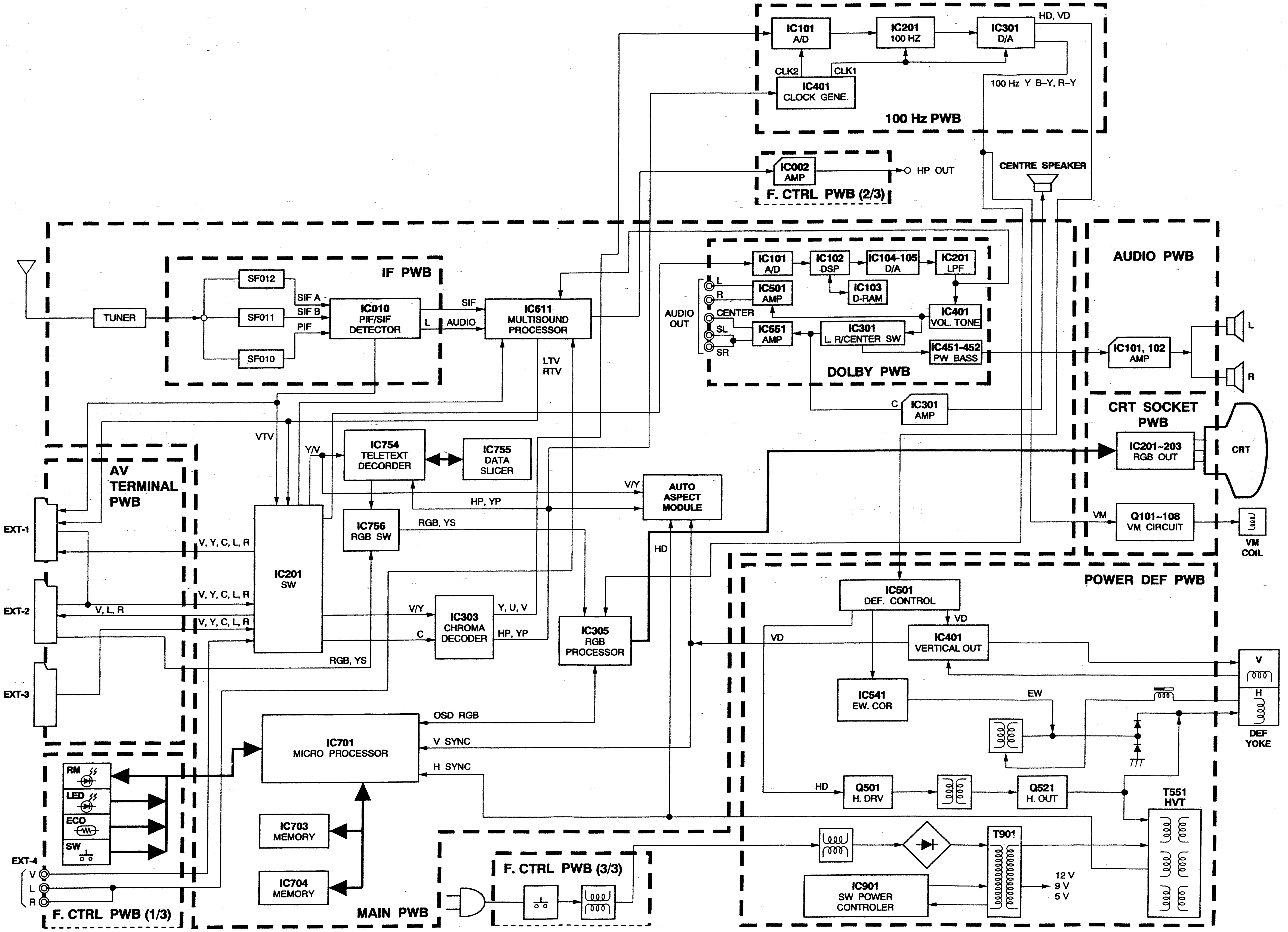
【 REMOTE CONTROL UNIT CIRCUIT DIAGRAM 】


K1
K9
K17
K25
K33
K2
K18
K26
K34
K3
K11
K19
K27
K4
K20
K28
K36
K5
K13
K21
K29
K37
K6
K14
K22
K30
K38
K7
K15
K23
K31
K39
K8
K16
K24
K32
K40
SW1
VCR
TEXT
LED1
R1
C1
Q1
R2
3(V)
X1
C2
C3
1 KI/O6
2 KI/O7
3 SO
4 SI/LED
5 REM
6 VDD
7 XOUT
8 XIN
9 VSS
10 RESET
KI/O5 20
KI/O4 19
KI/O3 18
KI/O2 17
KI/O1 16
KI/O0 15
KI3 14
KI2 13
KI1 12
KI0 11
IC1
RM-C793-1E
REMOTE CONTROL UNIT

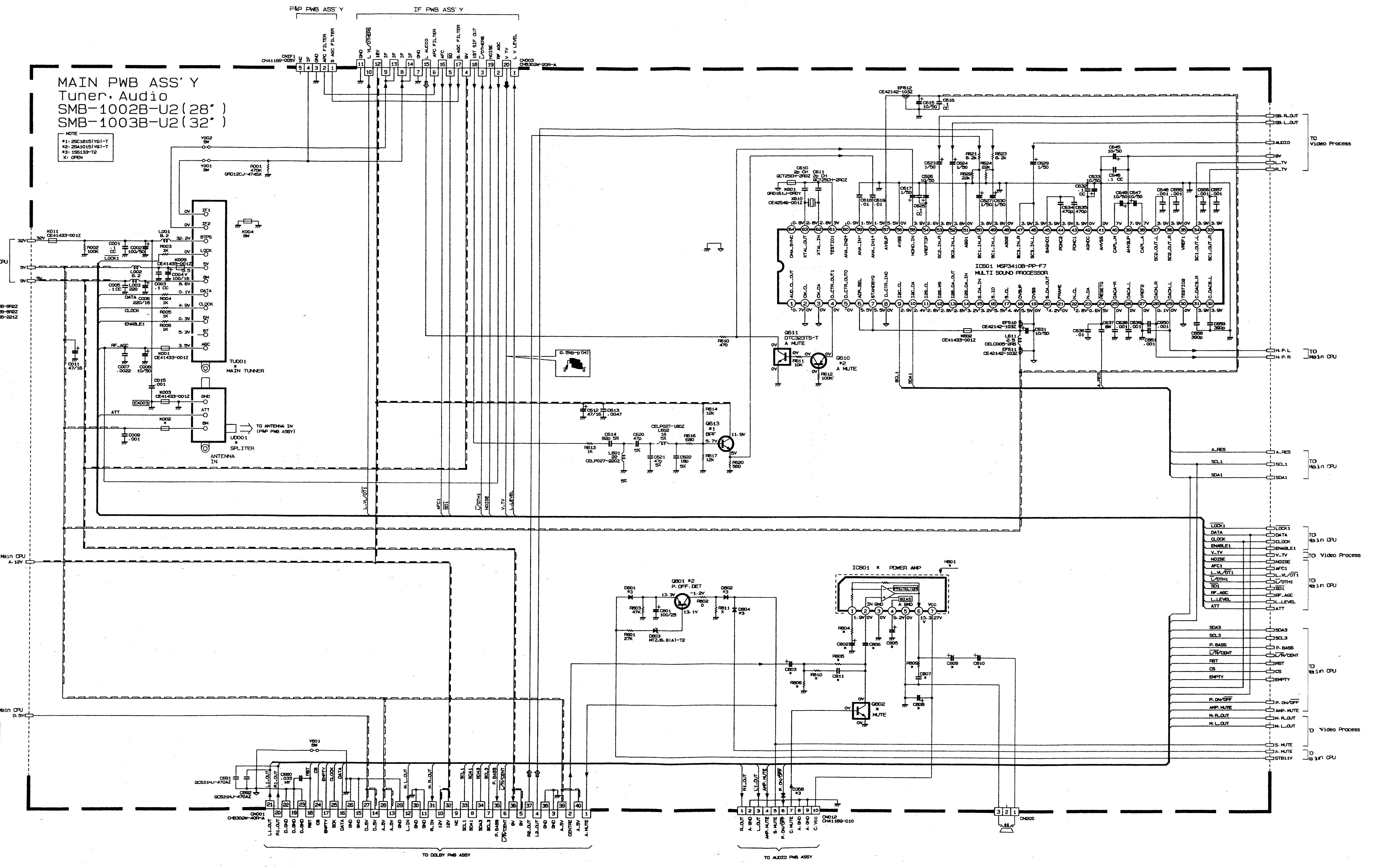
■KEY FUNCTION

No.	Key Name	No.	Key Name	No.	Key Name	No.	Key Name
1	1	14	3D	22	MODE (TEXT)	29	CANCEL (TEXT)
2	2	15	P BASS		REW ◀◀ (VCR)		STOP ■ (VCR)
3	3	16	PIP	23	SIZE (TEXT)	30	INDEX (TEXT)
4	4	17			FF ▶▶ (VCR)		(VCR)
5	5	18	REVEAL (TEXT)	24	SUB PAGE(TEXT)	31	▲
6	6		PLAY ▶ (VCR)		P V (VCR)	32	◀
7	7	19	TV	25		33	▼
8	8	20	MENU/OK	26	STORE (TEXT)	34	▶
9	9	21	HOLD (TEXT)		(VCR)	36	FREEZE
11	0		P Λ (VCR)	27		37	MULTI
13	ZOOM			28		38	SWAP
						39	SUB-P V
						40	SUB-P Λ

【 BLOCK DIAGRAM 】


IC101
A/D
IC201
100 HZ
IC301
D/A
HD, VD
CLK2
CLK1
IC401
CLOCK GENE.
100 Hz Y B–Y, R–Y
100 Hz PWB
IC002
AMP
HP OUT
F. CTRL PWB (2/3)
CENTRE SPEAKER
IF PWB
TUNER
SF012
SF011
SF010
SIF A
SIF B
PIF
IC010
PIF/SIF
DETECTOR
L
AUDIO
SIF
IC611
MULTISOUND
PROCESSOR
LTV
RTV
AUDIO
OUT
L
R
CENTER
SL
SR
IC101
A/D
IC102
DSP
IC104-105
D/A
IC201
LPF
IC103
D-RAM
IC501
AMP
IC401
VOL. TONE
IC551
AMP
IC301
L R/CENTER SW
IC451-452
PW BASS
DOLBY PWB
AUDIO PWB
IC101, 102
AMP
L
R
C
IC301
AMP
CRT SOCKET
PWB
IC201~203
RGB OUT
CRT
VM
Q101~108
VM CIRCUIT
VM
COIL
AV
TERMINAL
PWB
EXT-1
EXT-2
EXT-3
VTV
Y/V
IC754
TELETEXT
DECORDER
IC755
DATA
SLICER
HP, YP
V/Y
AUTO
ASPECT
MODULE
IC756
RGB SW
RGB, YS
V, Y, C, L, R
IC201
SW
V, Y, C, L, R
V, L, R
V, Y, C, L, R
V/Y
C
IC303
CHROMA
DECODER
Y, U, V
HP, YP
RGB, YS
HD
IC305
RGB
PROCESSOR
POWER DEF PWB
IC501
DEF. CONTROL
VD
VD
IC401
VERTICAL OUT
V
H
DEF
YOKE
IC541
EW. COR
EW
OSD RGB
V SYNC
H SYNC
IC701
MICRO PROCESSOR
RM
LED
ECO
SW
EXT-4
V
L
R
F. CTRL PWB (1/3)
IC703
MEMORY
IC704
MEMORY
MAIN PWB
F. CTRL PWB (3/3)
HD
Q501
H. DRV
Q521
H. OUT
T551
HVT
T901
IC901
SW POWER
CONTROLER
12 V
9 V
5 V

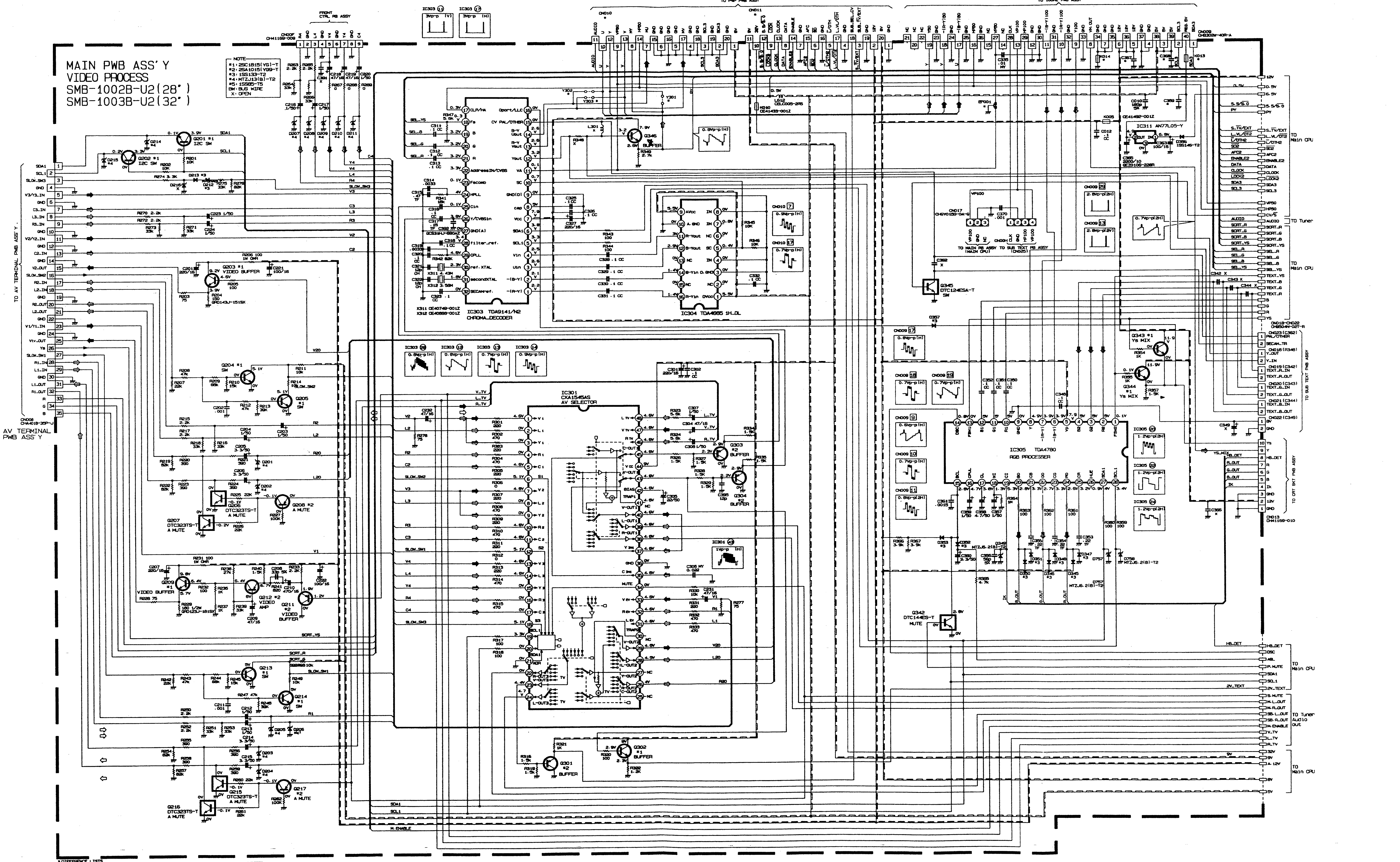
【 MAIN PWB CIRCUIT DIAGRAM (TUNER , AUDIO) 】


MAIN PWB ASS' Y
Tuner, Audio
SMB-1002B-U2(28")
SMB-1003B-U2(32")
NOTE
*1: 2SC1815(YG)-T
*2: 2SA1015(YG)-T
*3: 1SS133-T2
X: OPEN
P&P PWB ASS' Y
IF PWB ASS' Y
TU001 * MAIN TUNER
UD001 * SPLITER
ANTENNA IN
TO ANTENNA IN (P&P PWB ASSY)
L001 CELP028-8R2Z
L002 CELP028-8R2Z
L003 CELP026-221Z
TO Main CPU
IC501 MSP3410B-PP-F7 MULTI SOUND PROCESSOR
Q611 DTC323TS-T A MUTE
Q610 *2 A MUTE
Q613 *1 BPF
IC801 * POWER AMP
Q801 *2 P. OFF. DET
Q802 * MUTE
TO Video Process
TO Main CPU
TO DOLBY PWB ASSY
TO AUDIO PWB ASSY
CN001
CN002
CN003
CN005
CN012

*DIFFERENCE LISTS

	SMB-1002B-U2	SMB-1003B-U2
TU001	CEEK481-A01	CEEK481-A01
UD001	X	X
K002	X	X
IC801	X	X
H801	X	X
Q802	X	X
R804	X	X
R805	X	X
R806	X	X
R809	X	X
R810	X	X
C802	X	X
C803	X	X
C805	X	X
C806	X	X
C807	X	X
C808	X	X
C809	X	X
C810	X	X
C811	X	X

【 MAIN PWB CIRCUIT DIAGRAM (Video Process) 】


MAIN PWB ASS' Y
VIDEO PROCESS
SMB-1002B-U2(28")
SMB-1003B-U2(32")
NOTE
*1: 2SC1815(YG)-T
*2: 2SA1015(YG9-T
*3: 1SS133-T2
*4: MTZJ13(B)-T2
*5: 1SS85-T5
BW: BUS WIRE
X: OPEN
FRONT CTRL PB ASSY
CN00F CH41169-009
TO P&P PWB ASSY
TO 100Hz PWB ASSY
CN010
CN011
CN009
TO AV TERMINAL PWB ASS'Y
AV TERMINAL PWB ASS'Y
CN008
Q201 *1 I2C SW
Q202 *1 I2C SW
Q203 *1 VIDEO BUFFER
Q204 *1 SW
Q205 *1 SW
Q206 *2 A MUTE
Q207 DTC323TS-T A MUTE
Q209 VIDEO BUFFER
Q211 *2 VIDEO BUFFER
Q212 *2 VIDEO AMP
Q213 *1 SW
Q214 *1 SW
Q215 DTC323TS-T A MUTE
Q216 DTC323TS-T A MUTE
Q217 *2 A MUTE
IC303 TDA9141/N2 CHROMA DECODER
IC304 TDA4665 1H DL
IC301 CXA1545AS AV SELECTOR
IC305 TDA4780 RGB PROCESSER
IC311 AN77L05-Y
Q301 *2 BUFFER
Q302 *1 BUFFER
Q303 *2 BUFFER
Q304 *2 BUFFER
Q342 DTC144ES-T MUTE
Q343 *1 Ys MIX
Q344 *1 Ys MIX
Q345 DTC124ESA-T SW
Q346 BUFFER
CN017 CHSY0150-DA-G
TO MAIN PB ASSY (MAIN CPU)
TO SUB TEXT PB ASSY (CN025)
TO Main CPU
TO Tuner
TO SUB TEXT PWB ASSY
TO CRT SKT PWB ASSY
CN013 CH41169-010
TO Tuner Audio out
TO Main CPU

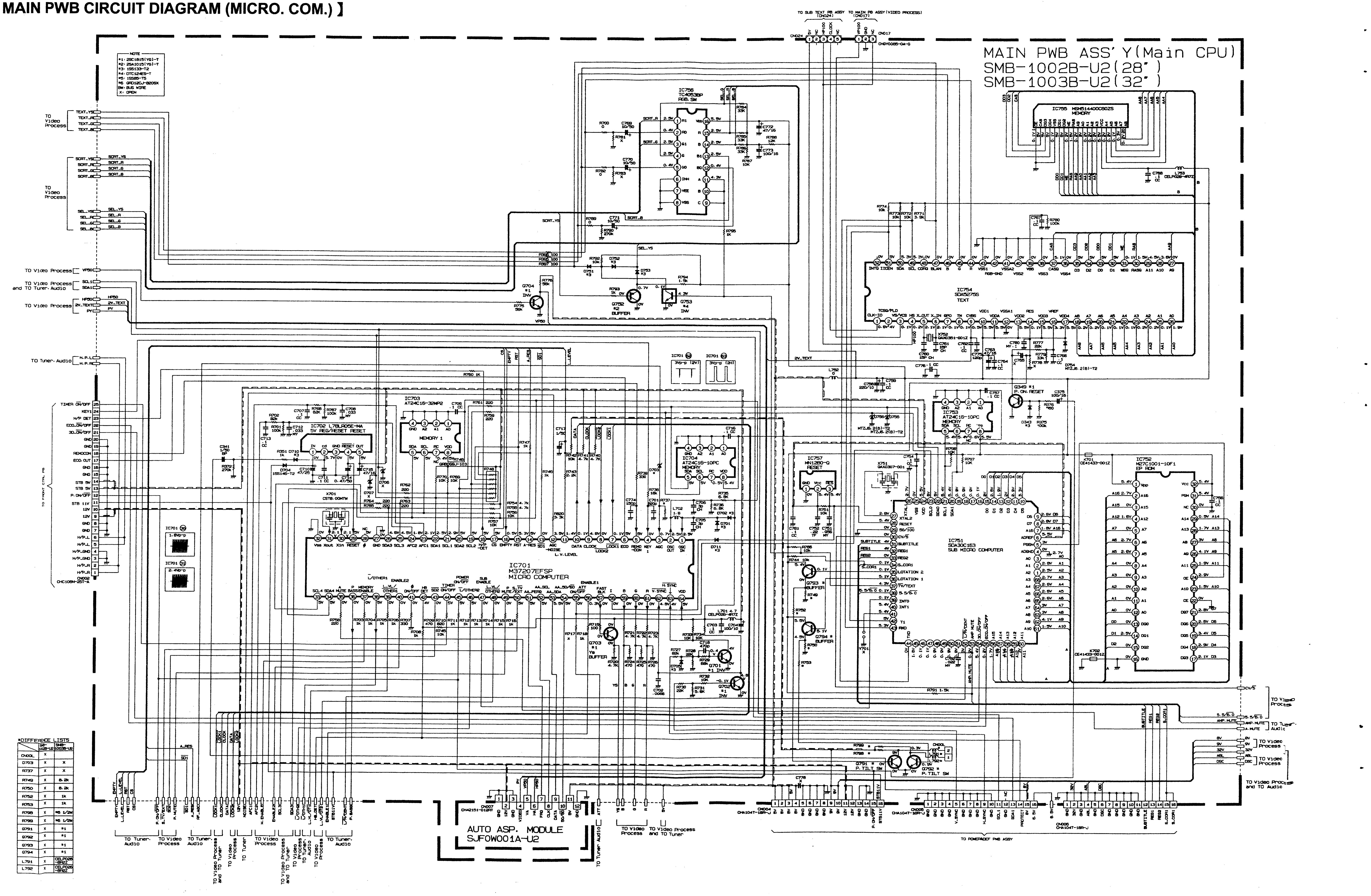
*DIFFERENCE LISTS

	SMB-1002B-U2	SMB-1003B-U2
Y301	BW	BW
Y302	BW	BW
Y303	BW	BW
CN010	X	X
CN011	X	X

	SMB-1002B-U2	SMB-1003B-U2
C367	X	X
C388	X	X
C389	X	X
EF001	CE41433-001Z	CE41433-001Z
K013	CE41433-001Z	CE41433-001Z

	SMB-1002B-U2	SMB-1003B-U2
K014	CE41433-001Z	CE41433-001Z

【 MAIN PWB CIRCUIT DIAGRAM (MICRO. COM.) 】

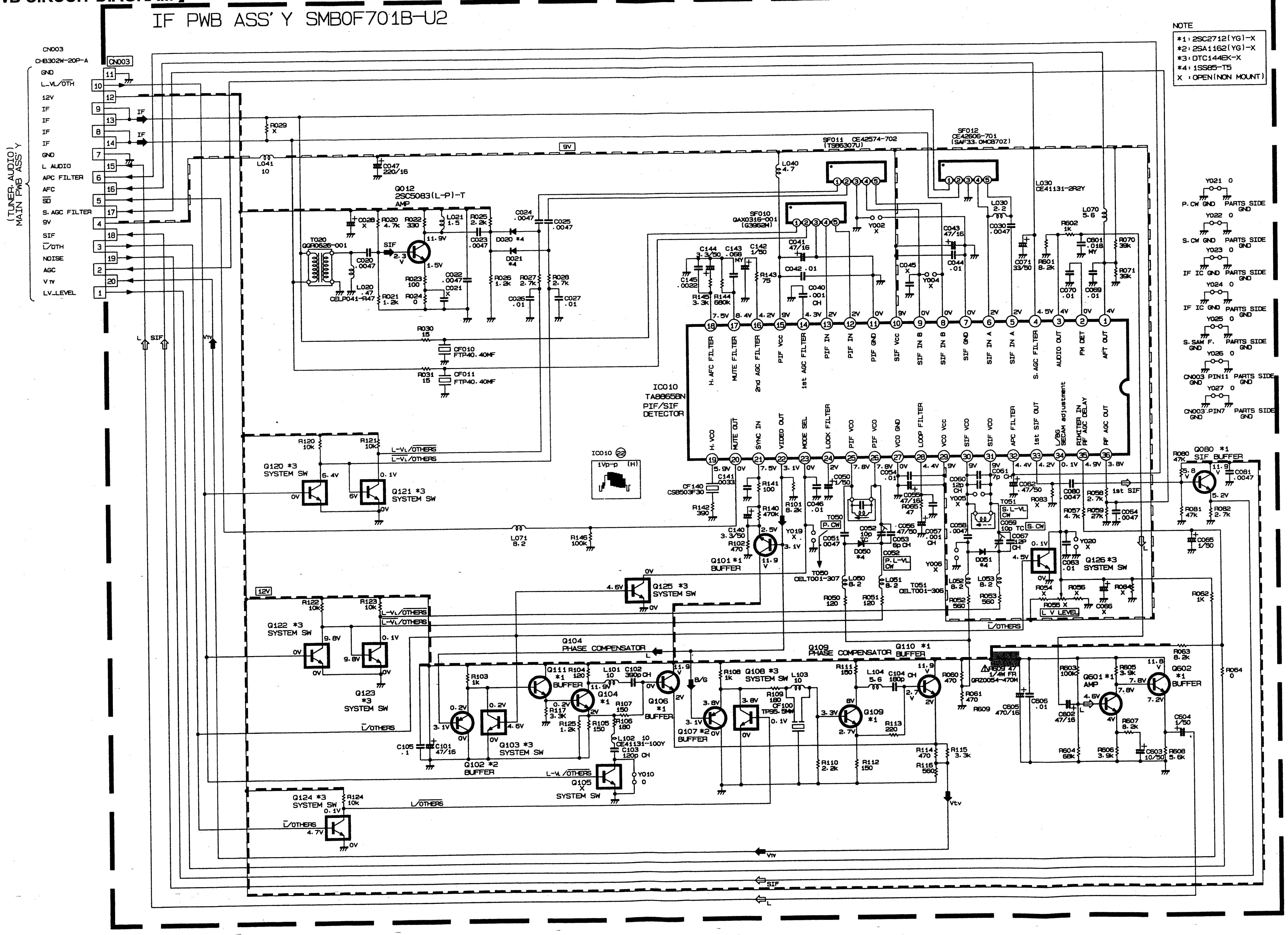

MAIN PWB ASS' Y(Main CPU)
SMB-1002B-U2(28")
SMB-1003B-U2(32")
TO SUB TEXT PB ASSY (CN024)
TO MAIN PB ASSY(VIDEO PROCESS) (CN017)
CN024
CN017
IC756 TC4053BP RGB. SW
IC755 MSM514400C60ZS MEMORY
IC754 SDA5275S TEXT
IC753 AT24C16-10PC MEMORY
IC752 M27C1001-10F1 EP ROM
IC751 SDA30C163 SUB MICRO COMPUTER
IC757 MN1280-Q RESET
IC704 AT24C16-10PC MEMORY
IC703 AT24C16-32MP2 MEMORY 1
IC702 L78LR05E-MA 5V REG/RESET RESET
IC701 M37207EFSP MICRO COMPUTER
X701 CSTB.00MTW
X751
X752
Q704 INV
Q752 BUFFER
Q753 INV
Q349 P. ON. RESET
Q703 YS BUFFER
Q701 INV
Q702 INV
Q793 BUFFER
Q794 BUFFER
Q791 P. TILT SW
Q792 P. TILT SW
TO Video Process
TO Video Process and TO Tuner-Audio
TO Tuner-Audio
TO FRONT CTL PB
CN002 CHC10BH-25T-A
AUTO ASP. MODULE SJF0W001A-U2
CN007 CHA2151-012AT
CN004 CHA104T-16R-A
CN005 CHA104T-16R-J
CN006 CHA104T-16R-J
TO POWER&DEF PWB ASSY
TO Video Process and TO Audio

NOTE
*1: 2SC1815(YG)-T
*2: 2SA1015(YG)-T
*3: 1SS133-T2
*4: DTC124ES-T
*5: 1SS85-T5
*6 GRD12CJ-820SX
BW: BUS WIRE
X: OPEN

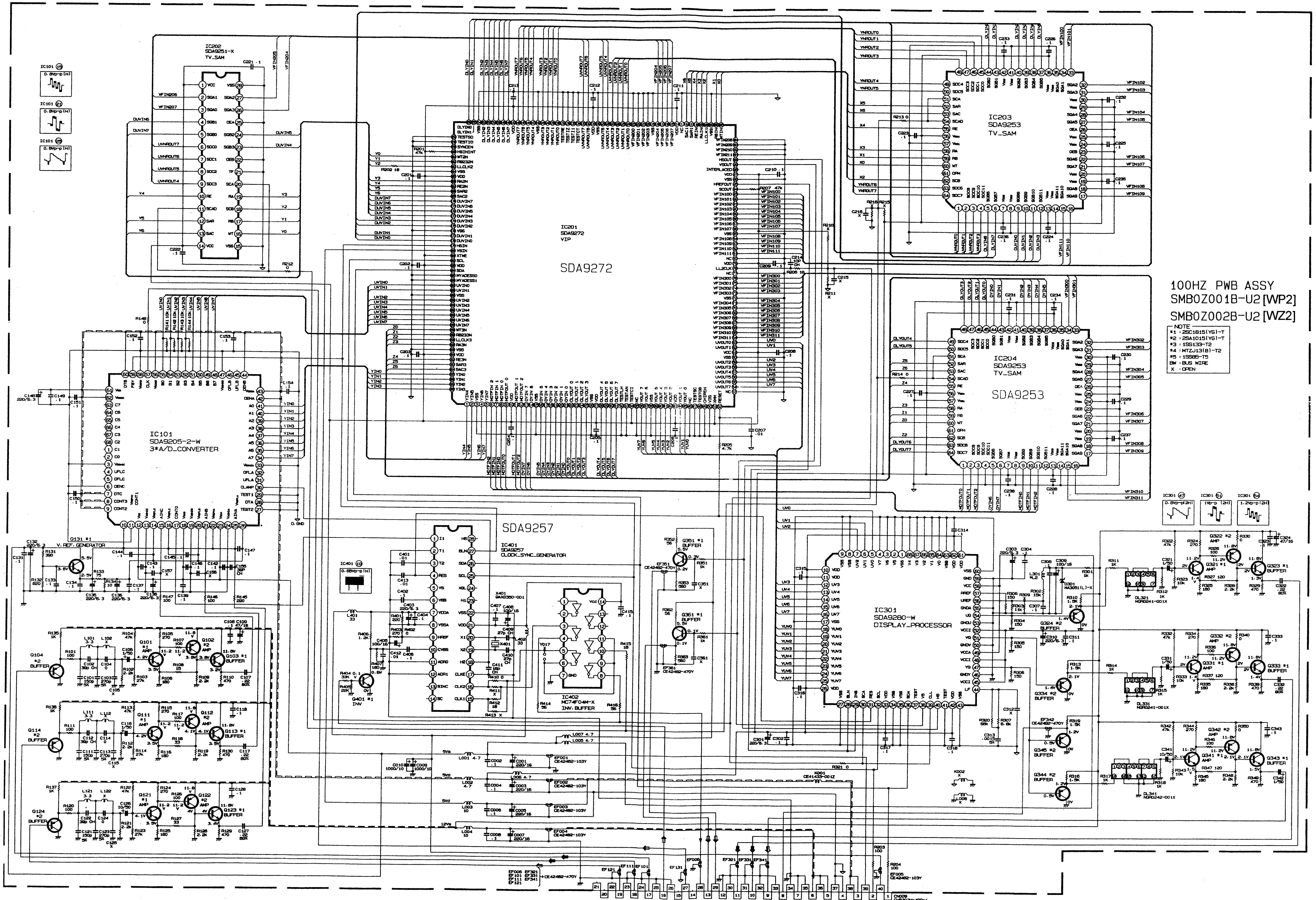
*DIFFERENCE LISTS

	SMB-1002B-U2	SMB-1003B-U2
CN00L	X	
D703	X	X
R737	X	X
R749	X	8.2k
R750	X	8.2k
R752	X	1k
R753	X	1k
R798	X	*6 1/2W
R799	X	*6 1/2W
Q791	X	*1
Q792	X	*1
Q793	X	*1
Q794	X	*1
L791	X	CELP026-8R2Z
L792	X	CELP026-8R2Z

【 IF PWB CIRCUIT DIAGRAM 】


IF PWB ASS'Y SMB0F701B-U2
NOTE
*1 : 2SC2712(YG)-X
*2 : 2SA1162(YG)-X
*3 : DTC144EK-X
*4 : 1SS85-T5
X : OPEN(NON MOUNT)
CN003
CHB302W-20P-A
(TUNER, AUDIO)
MAIN PWB ASS'Y
GND
L_VL/OTH
12V
IF
IF
IF
IF
GND
L AUDIO
APC FILTER
AFC
SD
S. AGC FILTER
9V
SIF
L/OTH
NOISE
AGC
V TV
LV_LEVEL
Q012
2SC5083(L-P)-T
AMP
T020
QQR0626-001
IC010
TA8865BN
PIF/SIF
DETECTOR
SF010
QAX0316-001
(G3962M)
SF011 CE42574-702
(TSB6307U)
SF012
CE42606-701
(SAF33.0MC870Z)
L030
CE41131-2R2Y
CF010
FTP40.40MF
CF011
FTP40.40MF
CF140
CSB503F30
H. AFC FILTER
MUTE FILTER
2nd AGC FILTER
PIF Vcc
1st AGC FILTER
PIF IN
PIF IN
PIF GND
SIF Vcc
SIF IN B
SIF IN B
SIF GND
SIF IN A
SIF IN A
S.AGC FILTER
AUDIO OUT
FM DET
AFT OUT
H. VCO
MUTE OUT
SYNC IN
VIDEO OUT
MODE SEL
LOCK FILTER
PIF VCO
PIF VCO
VCO GND
LOOP FILTER
VCO Vcc
SIF VCO
SIF VCO
APC FILTER
1st SIF OUT
L/BG SECAM adjustment
RIMITED IN RF AGC DELAY
RF AGC OUT
IC010 ㉒
1Vp-p (H)
Q080 *1
SIF BUFFER
Q101 *1
BUFFER
Q120 *3
SYSTEM SW
Q121 *3
SYSTEM SW
Q122 *3
SYSTEM SW
Q123 *3
SYSTEM SW
Q124 *3
SYSTEM SW
Q125 *3
SYSTEM SW
Q126 *3
SYSTEM SW
Q104
PHASE COMPENSATOR
Q109
PHASE COMPENSATOR
Q110 *1
BUFFER
Q111 *1
BUFFER
Q102 *2
BUFFER
Q103 *3
SYSTEM SW
Q105
SYSTEM SW
Q106 *1
BUFFER
Q107 *2
BUFFER
Q108 *3
SYSTEM SW
Q601 *1
AMP
Q602 *1
BUFFER
T050
CELT001-307
T051
CELT001-306
L102
CE41131-100Y
CF100
TPS5.5MW
R609 47
1/4W FR
QRZ0054-470M
S.L-VL
P.CW
S.CW
P.L-VL
L V LEVEL
L-VL/OTHERS
L/OTHERS
P.CW GND PARTS SIDE GND
S.CW GND PARTS SIDE GND
IF IC GND PARTS SIDE GND
S.SAW F. GND PARTS SIDE GND
CN003 PIN11 GND PARTS SIDE GND
CN003 PIN7 GND PARTS SIDE GND
9V
12V
SIF
Vtv
L
B/G
1st SIF

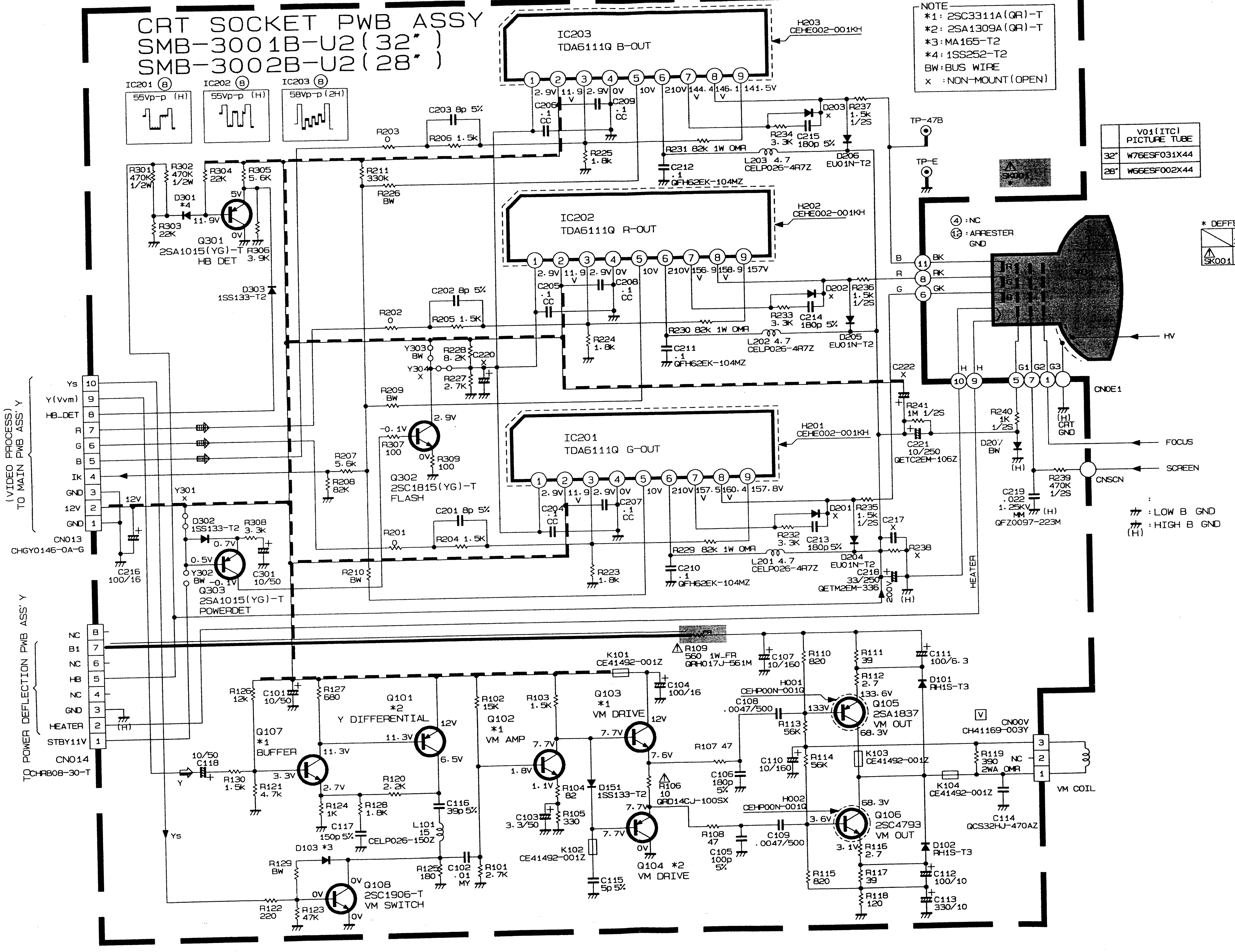
【 100Hz PWB CIRCUIT DIAGRAM 】


IC202 SDA9251-X TV_SAM
IC201 SDA9272 VIP
SDA9272
IC203 SDA9253 TV_SAM
IC204 SDA9253 TV_SAM
SDA9253
IC101 SDA9205-2-W 3*A/D_CONVERTER
SDA9257
IC401 SDA9257 CLOCK_SYNC_GENERATOR
IC402 MC74F04M-X INV. BUFFER
IC301 SDA9280-W DISPLAY_PROCESSOR
Q131 *1 V. REF. GENERATOR
Q401 *1 INV
Q351 *1 BUFFER
Q361 *1 BUFFER
IC101 ⑮ 0.8Vp-p (H)
IC101 ㉑ 0.8Vp-p (H)
IC101 ㊾ 0.8Vp-p (H)
IC401 ⑲ 0.65Vp-p (H)
IC301 ㊼ 0.8Vp-p (2H)
IC301 (51) 1Vp-p (2H)
IC301 (54) 1.2Vp-p (2H)
CN009 CH83024-40P-A MAIN PWB ASS'Y (VIDEO PROCESS)
DL321 NQR0241-001X
DL331 NQR0241-001X
DL341 NQR0242-001X

100HZ PWB ASSY
SMB0Z001B-U2 [WP2]
SMB0Z002B-U2 [WZ2]

NOTE
*1 : 2SC1815(YG)-T
*2 : 2SA1015(YG)-T
*3 : 1SS133-T2
*4 : MTZJ13(B)-T2
*5 : 1SS85-T5
BW : BUS WIRE
X : OPEN

【 CRT SKT PWB CIRCUIT DIAGRAM 】


CRT SOCKET PWB ASSY
SMB-3001B-U2(32")
SMB-3002B-U2(28")
IC201 ⑧ 55Vp-p (H)
IC202 ⑧ 55Vp-p (H)
IC203 ⑧ 58Vp-p (2H)
IC203 TDA6111Q B-OUT
IC202 TDA6111Q R-OUT
IC201 TDA6111Q G-OUT
H203 CEHE002-001KH
H202 CEHE002-001KH
H201 CEHE002-001KH
2.9V 11.9V 2.9V 0V 10V 210V 144.4V 146.1V 141.5V
2.9V 11.9V 2.9V 0V 10V 210V 156.9V 158.9V 157V
2.9V 11.9V 2.9V 0V 10V 210V 157.5V 160.4V 157.8V
C203 8p 5%
C202 8p 5%
C201 8p 5%
R203 0
R202 0
R201 0
R206 1.5k
R205 1.5K
R204 1.5K
C206 .1 CC
C209 .1 CC
C205 .1 CC
C208 .1 CC
C204 .1 CC
C207 .1 CC
R225 1.8K
R224 1.8K
R223 1.8K
R231 82K 1W OMR
R230 82K 1W OMR
R229 82K 1W OMR
C212 .1 QFH62EK-104MZ
C211 .1 QFH62EK-104MZ
C210 .1 QFH62EK-104MZ
L203 4.7 CELP026-4R7Z
L202 4.7 CELP026-4R7Z
L201 4.7 CELP026-4R7Z
R234 3.3K
R233 3.3K
R232 3.3K
C215 180p 5%
C214 180p 5%
C213 180p 5%
D203 x
D202 x
D201 x
R237 1.5K 1/2S
R236 1.5K 1/2S
R235 1.5K 1/2S
D206 EU01N-T2
D205 EU01N-T2
D204 EU01N-T2
TP-47B
TP-E
R301 470K 1/2W
R302 470K 1/2W
R304 22K
R305 5.6K
D301 *4
5V
11.9V
0V
R303 22K
Q301 2SA1015(YG)-T HB DET
R306 3.9K
D303 1SS133-T2
R211 330k
R226 BW
Y303 BW
Y304 x
R228 8.2K
C220 x
R227 2.7K
R209 BW
2.9V
-0.1V
R307 100
0V
R309 100
R207 5.6K
R208 82K
Q302 2SC1815(YG)-T FLASH
Y301 x
12V
D302 1SS133-T2
R308 3.3K
0.7V
0.5V
Y302 BW
-0.1V
C301 10/50
Q303 2SA1015(YG)-T POWERDET
R210 BW
C216 100/16
Ys 10
Y(Vvm) 9
HB_DET 8
R 7
G 6
B 5
Ik 4
GND 3
12V 2
GND 1
CN013 CHGY0146-0A-G
(VIDEO PROCESS) TO MAIN PWB ASS'Y
NC 8
B1 7
NC 6
HB 5
NC 4
GND 3
HEATER 2
STBY11V 1
CN014 CHRB08-30-T
TO POWER DEFLECTION PWB ASS'Y
C222 x
R241 1M 1/2S
C221 10/250 QETC2EM-106Z
C217 x
R238 x
C218 33/250 QETM2EM-336
200V
(H)
HEATER
B 11 BK
R 8 RK
G 6 GK
④:NC
⑫:ARRESTER GND
SK001
V01
HV
H H G1 G2 G3
10 9 5 7 1
CN0E1
R240 1K 1/2S
(H) CRT GND
D207 BW
(H)
FOCUS
SCREEN
CNSCN
R239 470K 1/2S
C219 .022 1.25KV MM
QFZ0097-223M
(H)
LOW B GND
(H) HIGH B GND
R109 560 1W_FR QRH017J-561M
K101 CE41492-001Z
C107 10/160
R110 820
R111 39
C111 100/6.3
R112 2.7
D101 RH1S-T3
C104 100/16
H001 CEHP00N-001Q
133.6V
Q105 2SA1837 VM OUT
68.3V
133V
C108 .0047/500
R113 56K
R126 12K
C101 10/50
R127 680
Q101 *2 Y DIFFERENTIAL
12V
Q107 *1 BUFFER
11.3V
11.3V
6.5V
3.3V
3.3V
2.7V
R102 15K
Q102 *1 VM AMP
R103 1.5K
Q103 *1 VM DRIVE
12V
7.7V
7.7V
7.6V
R107 47
C110 10/160
R114 56K
K103 CE41492-001Z
CN00V CH41169-003Y
R119 390 2WA OMR
NC
3 2 1
VM COIL
K104 CE41492-001Z
C114 QCS32HJ-470AZ
C118 10/50
Y
R130 1.5K
R121 4.7K
R120 2.2K
R124 1K
R128 1.8K
C116 39p 5%
C117 150p 5%
L101 15 CELP026-150Z
1.8V
1.1V
R104 82
D151 1SS133-T2
R106 10 QRD14CJ-100SX
C106 180p 5%
C103 3.3/50
R105 330
7.7V
7.7V
0V
K102 CE41492-001Z
C115 5p 5%
Q104 *2 VM DRIVE
H002 CEHP00N-001Q
3.6V
58.3V
Q106 2SC4793 VM OUT
3.1V
R116 2.7
D102 RH1S-T3
R108 47
C109 .0047/500
C105 100p 5%
R115 820
R117 39
R118 120
C112 100/10
C113 330/10
D103 *3
R129 BW
R125 180
C102 .01 MY
R101 2.7K
0V
Q108 2SC1906-T VM SWITCH
0V
0V
R122 220
R123 47K
Ys

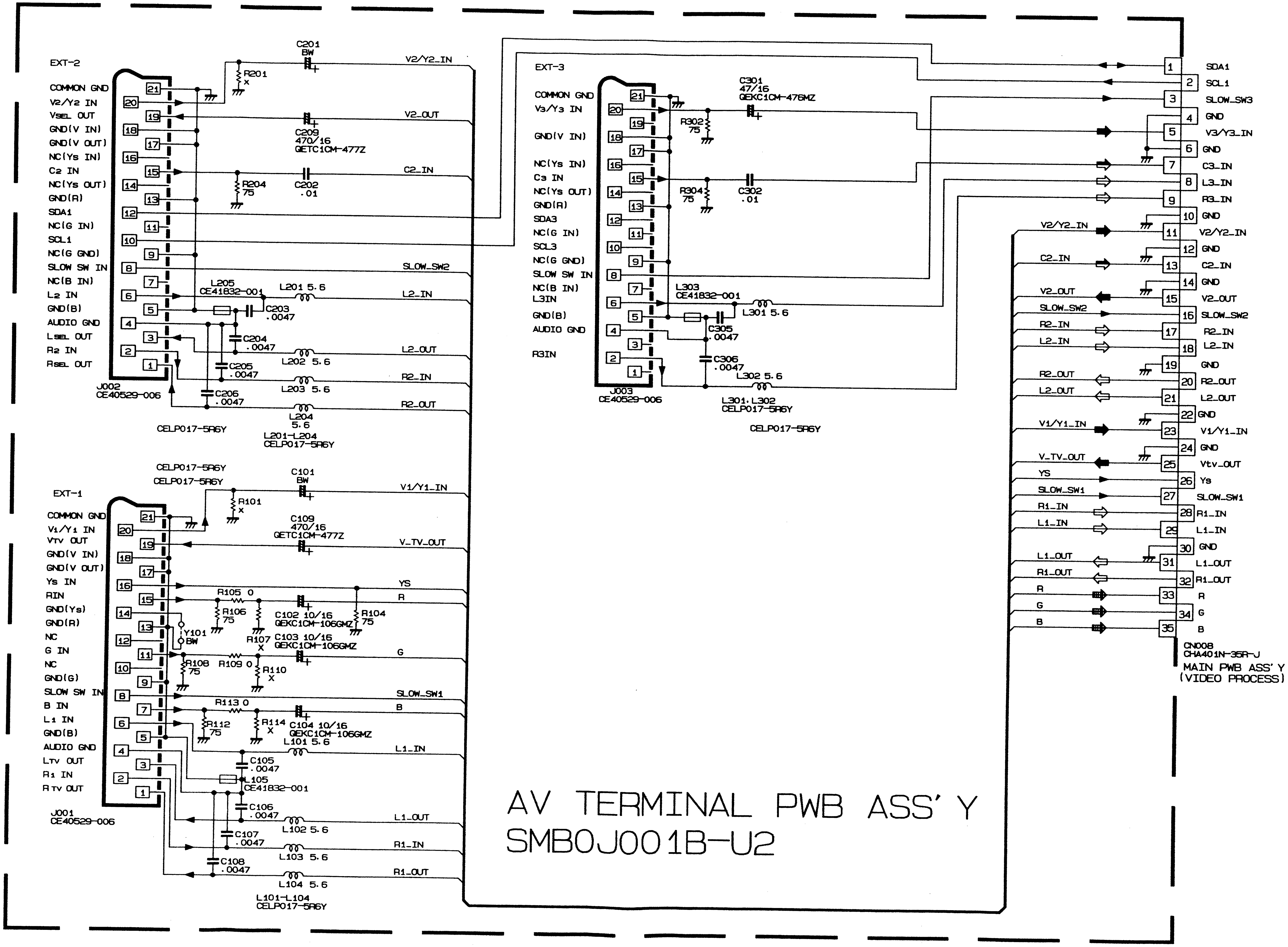
NOTE
- *1: 2SC3311A(QR)-T
- *2: 2SA1309A(QR)-T
- *3: MA165-T2
- *4: 1SS252-T2
- BW: BUS WIRE
- x : NON-MOUNT(OPEN)

	V01(ITC) PICTURE TUBE
32"	W76ESF031X44
28"	W66ESF002X44

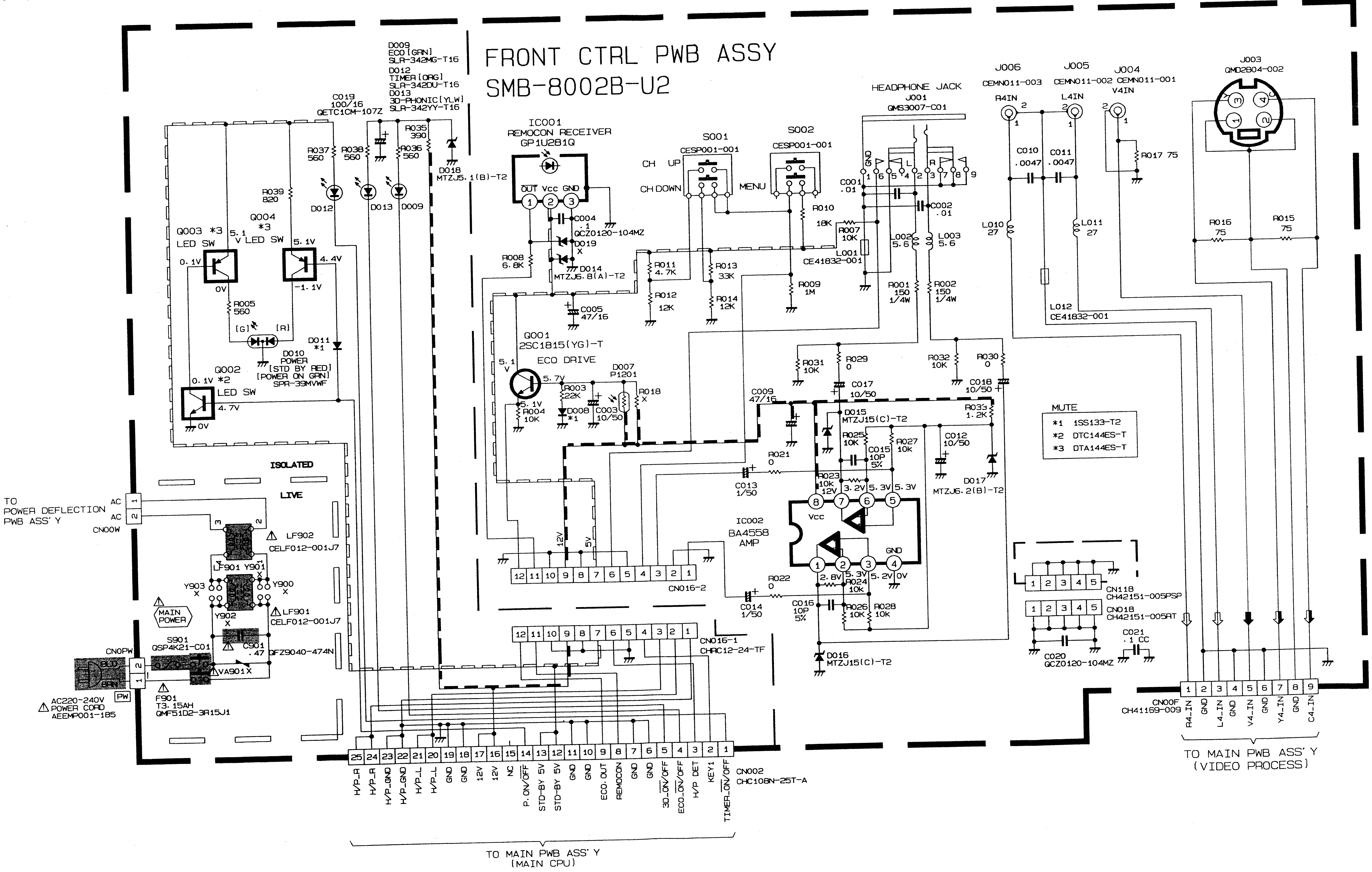
* DEFFERENCE LIST

	SMB-3001B-U2	SMB-3002B-U2
⚠ SK001	CE42670-001J1	CE42535-001J1

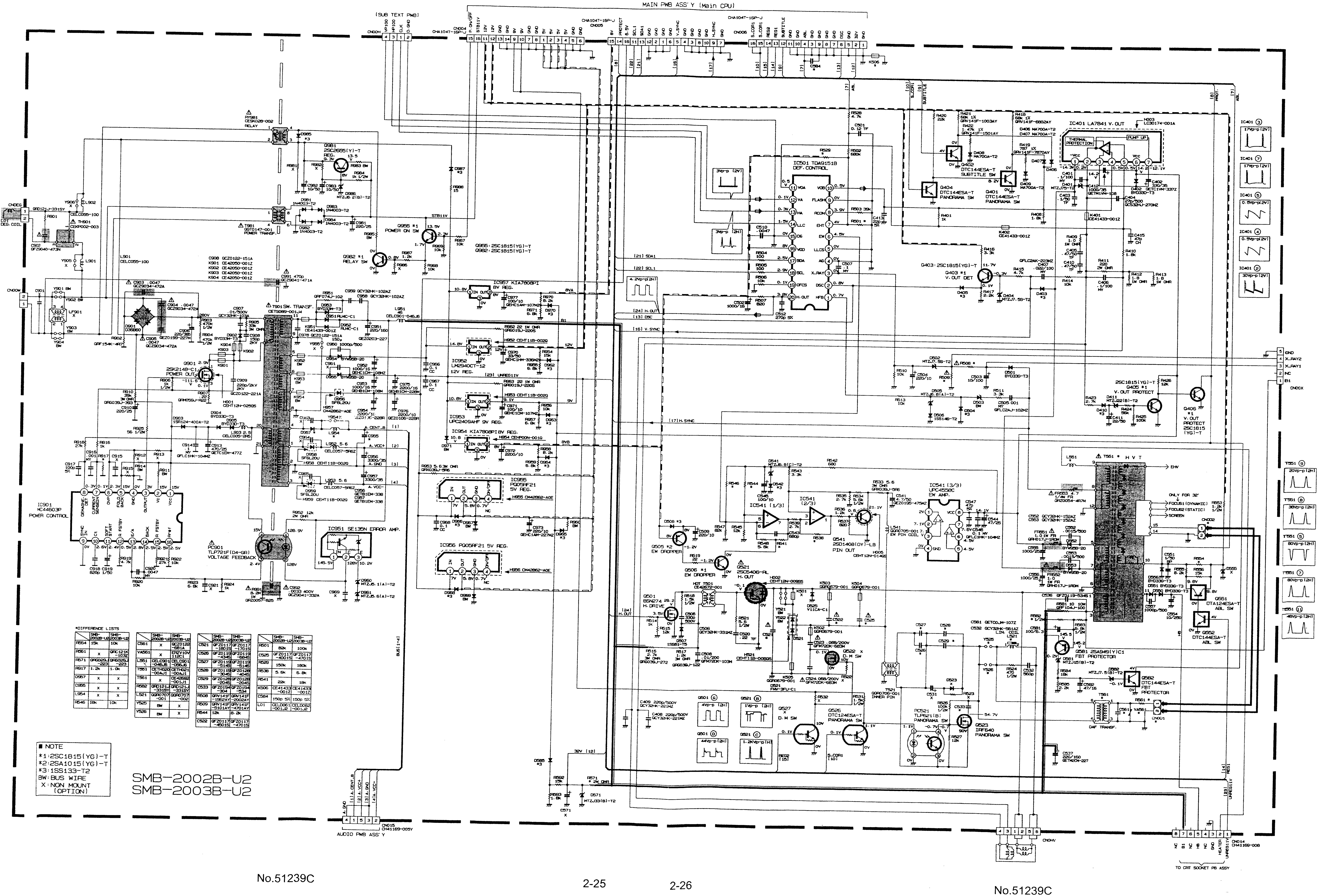
【 AV TERMINAL PWB CIRCUIT DIAGRAM 】


EXT-2
COMMON GND
V2/Y2 IN
VSEL OUT
GND(V IN)
GND(V OUT)
NC(Ys IN)
C2 IN
NC(Ys OUT)
GND(R)
SDA1
NC(G IN)
SCL1
NC(G GND)
SLOW SW IN
NC(B IN)
L2 IN
GND(B)
AUDIO GND
LSEL OUT
R2 IN
RSEL OUT
J002
CE40529-006
C201
BW
R201
x
V2/Y2_IN
C209
470/16
GETC1CM-477Z
V2_OUT
R204
75
C202
.01
C2_IN
SLOW_SW2
L205
CE41832-001
L201 5.6
L2_IN
C203
.0047
C204
.0047
L202 5.6
L2_OUT
C205
.0047
L203 5.6
R2_IN
C206
.0047
L204
5.6
R2_OUT
CELP017-5R6Y
L201-L204
CELP017-5R6Y
EXT-3
COMMON GND
V3/Y3 IN
GND(V IN)
NC(Ys IN)
C3 IN
NC(Ys OUT)
GND(R)
SDA3
NC(G IN)
SCL3
NC(G GND)
SLOW SW IN
NC(B IN)
L3IN
GND(B)
AUDIO GND
R3IN
J003
CE40529-006
C301
47/16
GEKC1CM-476MZ
R302
75
R304
75
C302
.01
L303
CE41832-001
L301 5.6
C305
.0047
C306
.0047
L302 5.6
L301,L302
CELP017-5R6Y
CELP017-5R6Y
EXT-1
COMMON GND
V1/Y1 IN
VTV OUT
GND(V IN)
GND(V OUT)
Ys IN
RIN
GND(Ys)
GND(R)
NC
G IN
NC
GND(G)
SLOW SW IN
B IN
L1 IN
GND(B)
AUDIO GND
LTV OUT
R1 IN
RTV OUT
J001
CE40529-006
CELP017-5R6Y
CELP017-5R6Y
C101
BW
R101
x
V1/Y1_IN
C109
470/16
GETC1CM-477Z
V_TV_OUT
YS
R105 0
R
R106
75
C102 10/16
GEKC1CM-106GMZ
R104
75
Y101
BW
R107
X
C103 10/16
GEKC1CM-106GMZ
R108
75
R109 0
R110
X
G
SLOW_SW1
R113 0
B
R112
75
R114
X
C104 10/16
GEKC1CM-106GMZ
L101 5.6
L1_IN
C105
.0047
L105
CE41832-001
C106
.0047
L102 5.6
L1_OUT
C107
.0047
L103 5.6
R1_IN
C108
.0047
L104 5.6
R1_OUT
L101-L104
CELP017-5R6Y
1 SDA1
2 SCL1
3 SLOW_SW3
4 GND
5 V3/Y3_IN
6 GND
7 C3_IN
8 L3_IN
9 R3_IN
10 GND
11 V2/Y2_IN
12 GND
13 C2_IN
14 GND
15 V2_OUT
16 SLOW_SW2
17 R2_IN
18 L2_IN
19 GND
20 R2_OUT
21 L2_OUT
22 GND
23 V1/Y1_IN
24 GND
25 Vtv_OUT
26 Ys
27 SLOW_SW1
28 R1_IN
29 L1_IN
30 GND
31 L1_OUT
32 R1_OUT
33 R
34 G
35 B
V2/Y2_IN
C2_IN
V2_OUT
SLOW_SW2
R2_IN
L2_IN
R2_OUT
L2_OUT
V1/Y1_IN
V_TV_OUT
YS
SLOW_SW1
R1_IN
L1_IN
L1_OUT
R1_OUT
R
G
B
CN008
CHA401N-35R-J
MAIN PWB ASS'Y
(VIDEO PROCESS)
AV TERMINAL PWB ASS'Y
SMB0J001B-U2

【 FRONT CONTROL PWB CIRCUIT DIAGRAM 】


FRONT CTRL PWB ASSY
SMB-8002B-U2
D009 ECO [GRN] SLR-342MG-T16
D012 TIMER [ORG] SLR-342DU-T16
D013 3D-PHONIC [YLW] SLR-342YY-T16
C019 100/16 QETC1CM-107Z
R035 390
R036 560
R037 560
R038 560
R039 820
D018 MTZJ5.1(B)-T2
Q003 *3 LED SW
Q004 *3 5.1 V LED SW
0.1V
0V
5.1V
4.4V
-1.1V
R005 560
[G] [R]
D011 *1
D010 POWER [STD BY RED] [POWER ON GRN] SPR-39MVWF
Q002 *2 LED SW
0.1V
4.7V
0V
IC001 REMOCON RECEIVER GP1U281Q
OUT Vcc GND
C004 .1 QCZ0120-104MZ
D019 X
D014 MTZJ6.8(A)-T2
R008 6.8K
C005 47/16
Q001 2SC1815(YG)-T ECO DRIVE
5.1V
5.7V
R003 22K
R004 10K
D008 *1
C003 10/50
D007 P1201
R018 X
S001 CESP001-001
S002 CESP001-001
CH UP
CH DOWN
MENU
R010 18K
R011 4.7K
R012 12K
R013 33K
R014 12K
R009 1M
HEADPHONE JACK J001 QMS3007-C01
GND
L R
C001 .01
C002 .01
R007 10K
L001 CE41832-001
L002 5.6
L003 5.6
R001 150 1/4W
R002 150 1/4W
J006 CEMN011-003 R4IN
J005 CEMN011-002 L4IN
J004 CEMN011-001 V4IN
J003 QMD2B04-002
C010 .0047
C011 .0047
R017 75
L010 27
L011 27
L012 CE41832-001
R016 75
R015 75
R031 10K
R029 0
R032 10K
R030 0
C017 10/50
C018 10/50
C009 47/16
D015 MTZJ15(C)-T2
R033 1.2K
R025 10K
C015 10P 5%
R027 10K
C012 10/50
D017 MTZJ6.2(B)-T2
R021 0
C013 1/50
R023 10K
12V
3.2V
5.3V
5.3V
IC002 BA4558 AMP
Vcc
GND
2.8V
5.3V
5.2V
0V
R022 0
R024 10k
C014 1/50
C016 10P 5%
R026 10K
R028 10K
D016 MTZJ15(C)-T2
MUTE
*1 1SS133-T2
*2 DTC144ES-T
*3 DTA144ES-T
CN11B CH42151-005PSP
CN01B CH42151-005RT
C020 QCZ0120-104MZ
C021 .1 CC
CN016-2
CN016-1 CHRC12-24-TF
12V
5V
ISOLATED
LIVE
TO POWER DEFLECTION PWB ASS'Y
AC
AC
CN00W
LF902 CELF012-001J7
LF901
Y901 X
Y903 X
Y900 X
Y902 X
MAIN POWER
LF901 CELF012-001J7
S901 QSP4K21-C01
C901 .47 QFZ9040-474N
CN0PW
BLU
BRN
PW
VA901 X
F901 T3.15AH QMF51D2-3R15J1
AC220-240V POWER CORD AEEMP001-185
CN002 CHC108N-25T-A
1 TIMER_ON/OFF
2 KEY1
3 H/P DET
4 ECO_ON/OFF
5 3D_ON/OFF
6 GND
7 GND
8 REMOCON
9 ECO. OUT
10 GND
11 GND
12 STD-BY 5V
13 STD-BY 5V
14 P. ON/OFF
15 NC
16 12V
17 12V
18 GND
19 GND
20 H/P_L
21 H/P_L
22 H/P_GND
23 H/P_GND
24 H/P_R
25 H/P_R
TO MAIN PWB ASS'Y (MAIN CPU)
CN00F CH41169-009
1 R4_IN
2 GND
3 L4_IN
4 GND
5 V4_IN
6 GND
7 Y4_IN
8 GND
9 C4_IN
TO MAIN PWB ASS'Y (VIDEO PROCESS)

【 POWER DEF PWB CIRCUIT DIAGRAM 】


MAIN PWB ASS'Y (Main CPU)
[SUB TEXT PWB]
IC501 TDA9151B DEF. CONTROL
IC401 LA7841 V. OUT
IC901 NC44603P POWER CONTROL
IC951 SE135N ERROR AMP.
IC952 LM2940CT-12 12V REG.
IC953 UPC2409AHF 9V REG.
IC954 KIA7808PI 8V REG.
IC955 PQ05RF21 5V REG.
IC956 PQ05RF21 5V REG.
IC957 KIA7808PI 8V REG.
IC541 UPC4558C EW AMP.
PC901 TLP721F(D4-GR) VOLTAGE FEEDBACK
T901 SW. TRANSF.
T961 POWER TRANSF.
T561 H V T
Q901 2SK2148-C1 POWER OUT
Q521 2SC5406-RL H. OUT
Q501 BSN274 H. DRIVE
Q505 EW DROPPER
Q506 EW DROPPER
Q541 2SD1408(OY)-LB PIN OUT
Q581 2SA949(Y)C1 FBT PROTECTOR
Q582 DTC144ESA-T FBT PROTECTOR
Q551 DTA124ESA-T ABL SW
Q552 DTC144ESA-T ABL SW
Q523 IRF640 PANORAMA SW
Q526 DTC124ESA-T PANORAMA SW
Q527 D.M SW
Q522 D.M SW
Q403 2SC1815(YG)-T V. OUT DET
Q405 V. OUT PROTECT
Q406 V. OUT PROTECT 2SC1815(YG)-T
Q404 DTC144ESA-T PANORAMA SW
Q401 DTC144ESA-T PANORAMA SW
Q402 DTC144ESA-T SUBTITLE SW
Q955 POWER ON SW
Q982 RELAY SW
Q981 2SC2655(Y)-T
RY981 CESK026-002 RELAY
L01 DEG. COIL
DAF TRANSF.
AUDIO PWB ASS'Y
TO CRT SOCKET PB ASSY
FOCUS1 (DYNAMIC)
FOCUS2 (STATIC)
SCREEN
EHV
ONLY FOR 32"

*DIFFERENCE LISTS

	SMB-2002B-U2	SMB-2003B-U2
R554	15k	10k
R561	X	QRC121K-103Z
R571	QRG029J-223	QRG029J-223
R917	1.2k	1.0k
D957	X	X
C955	X	X
L954	X	X
R546	18k	10k

	SMB-2002B-U2	SMB-2003B-U2
C561	X	QCZ0122-681A
VA561	X	ERZV10V112C1
L551	CELC901-046J6	CELC901-056J6
T551	CETH020-00AJ1	CETH021-00AJ1
T561	X	CE42592-001J1
R582	QRD121J-331SY	QRD121J-331SY
L521	QQR0707-001	QQR0707-002
Y525	BW	X
Y526	BW	X

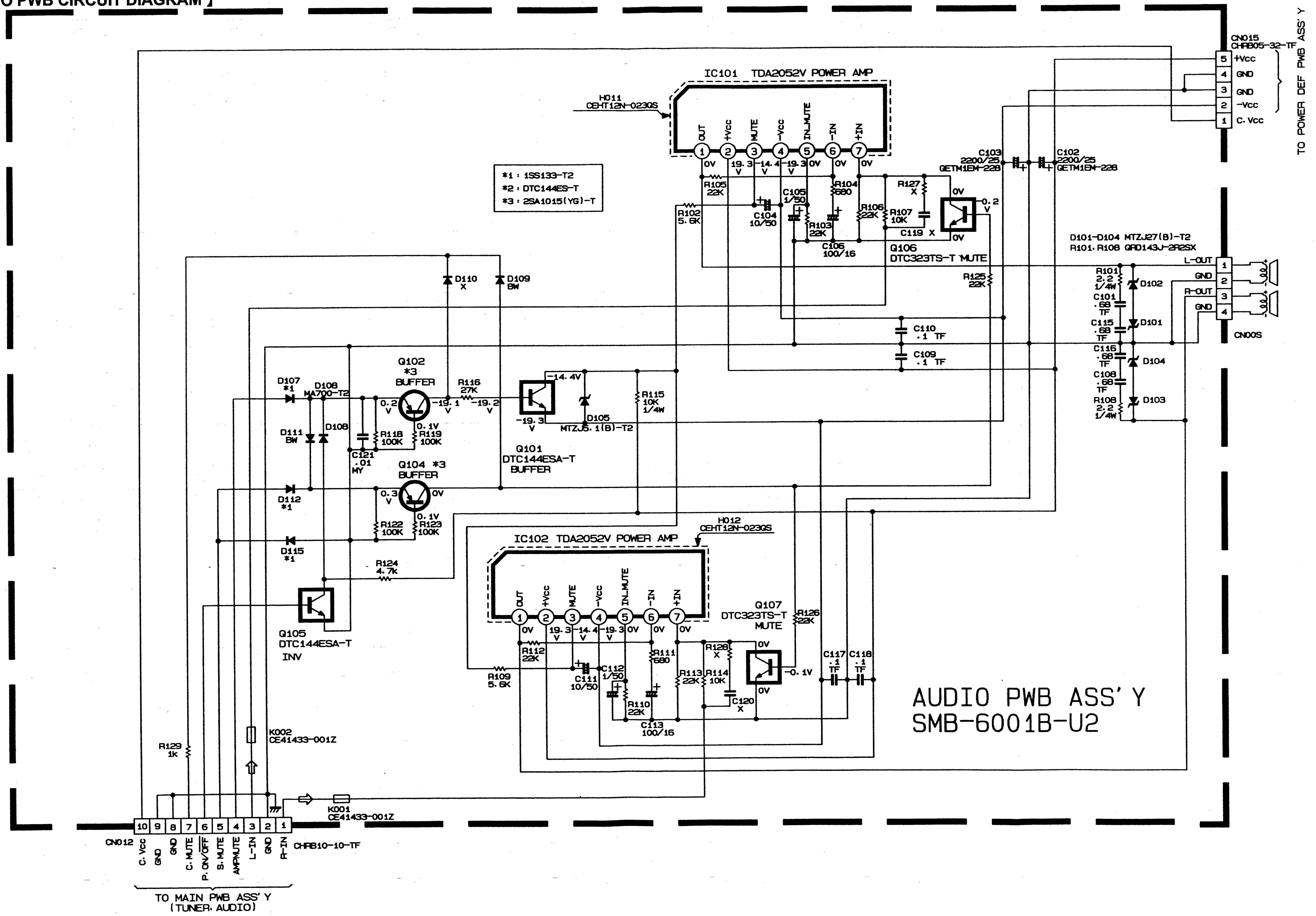
	SMB-2002B-U2	SMB-2003B-U2
C521	QFZ0117-1801S	QFZ0117-1701S
C526	QFZ0119-434S	QFZ0119-684S
C527	QFZ0119-514S	QFZ0119-514S
C528	QFZ0119-304S	QFZ0128-404S
C529	QFZ0128-204S	QFZ0128-204S
C533	QFZ0194-304	QFZ0194-534
R508	QRV141F-1962AY	QRV141F-2002AY
R509	QRV141F-5101AY	QRV141F-4701AY
R544	12k	8.2k
C522	QFZ0117-4501S	QFZ0117-4701S

	SMB-2002B-U2	SMB-2003B-U2
R501	82k	100k
C525	QFZ0117-4001S	QFZ0117-4701S
R529	150k	180k
R538	5.6k	6.8k
R541	22k	18k
K506	CE41433-001Z	CE41433-001Z
C584	150p 5%	150p 5%
L01	CELD061-001J2	CELD062-001J2

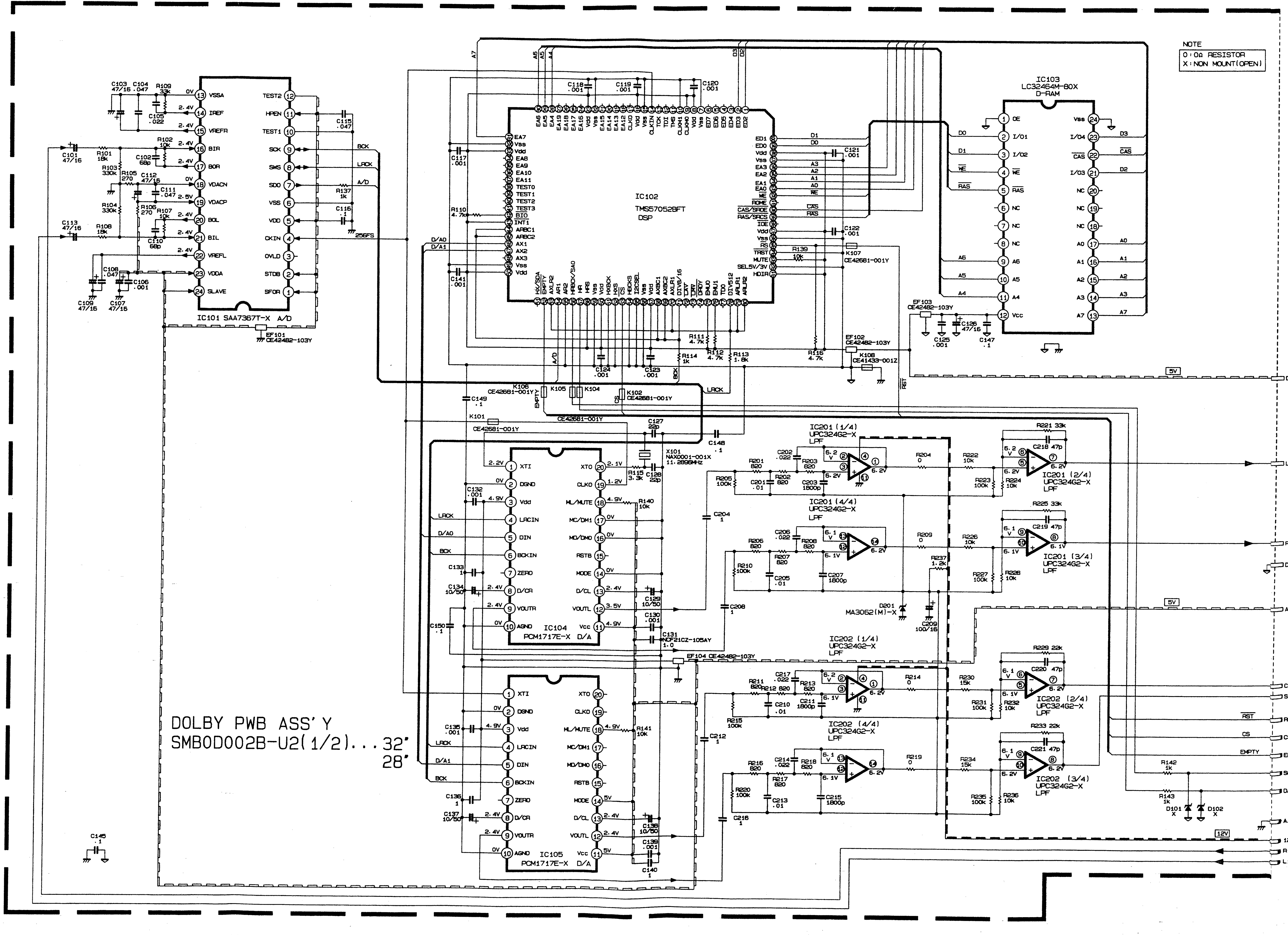
■ NOTE
*1:2SC1815(YG)-T
*2:2SA1015(YG)-T
*3:1SS133-T2
BW: BUS WIRE
X: NON MOUNT (OPTION)

SMB-2002B-U2
SMB-2003B-U2

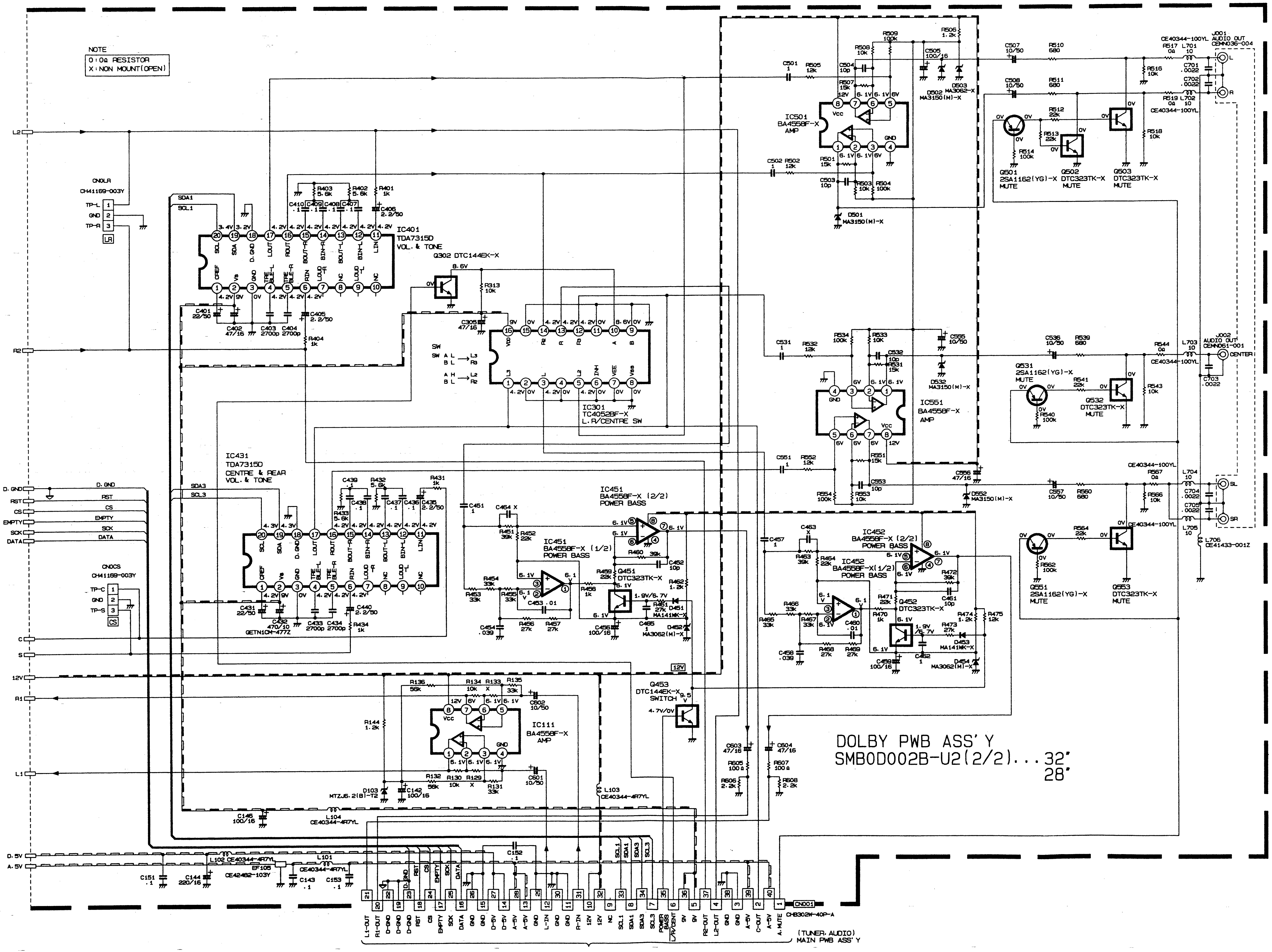
【 AUDIO PWB CIRCUIT DIAGRAM 】


IC101 TDA2052V POWER AMP
H011
CEHT12N-023GS
OUT
+Vcc
MUTE
-Vcc
IN_MUTE
-IN
+IN
0V
19.3 V
-14.4
-19.3 V
R105 22K
R102 5.6K
C104 10/50
C105 1/50
R103 22K
R104 680
C106 100/16
R106 22K
R107 10K
R127 X
C119 X
Q106
DTC323TS-T MUTE
-0.2 V
C103 2200/25 GETM1EM-228
C102 2200/25 GETM1EM-228
CN015
CHRB05-32-TF
+Vcc
GND
GND
-Vcc
C.Vcc
TO POWER DEF PWB ASS'Y
*1 : 1SS133-T2
*2 : DTC144ES-T
*3 : 2SA1015(YG)-T
D110 X
D109 BW
D101-D104 MTZJ27(B)-T2
R101.R108 GRD143J-2R2SX
R125 22K
R101 2.2 1/4W
C101 .68 TF
C115 .68 TF
C116 .68 TF
C108 .68 TF
R108 2.2 1/4W
D102
D101
D104
D103
L-OUT
GND
R-OUT
GND
CN005
C110 .1 TF
C109 .1 TF
Q102 *3 BUFFER
D107 *1
D108 MA700-T2
D111 BW
D106
C121 .01 MY
R118 100K
R119 100K
0.2 V
-19.1 V
0.1V
R116 27K
-19.2 V
-14.4V
-19.3 V
D105 MTZJ5.1(B)-T2
R115 10K 1/4W
Q101 DTC144ESA-T BUFFER
Q104 *3 BUFFER
D112 *1
0.3 V
0V
0.1V
R122 100K
R123 100K
D115 *1
R124 4.7k
Q105 DTC144ESA-T INV
IC102 TDA2052V POWER AMP
H012
CEHT12N-023GS
R112 22K
R109 5.6K
C111 10/50
C112 1/50
R110 22K
R111 680
C113 100/16
R113 22K
R114 10K
R128 X
C120 X
Q107 DTC323TS-T MUTE
R126 22K
-0.1V
C117 .1 TF
C118 .1 TF
AUDIO PWB ASS'Y
SMB-6001B-U2
R129 1K
K002 CE41433-001Z
K001 CE41433-001Z
CN012
C.Vcc
GND
GND
C.MUTE
P.ON/OFF
S.MUTE
AMPMUTE
L-IN
GND
R-IN
CHRB10-10-TF
TO MAIN PWB ASS'Y (TUNER, AUDIO)

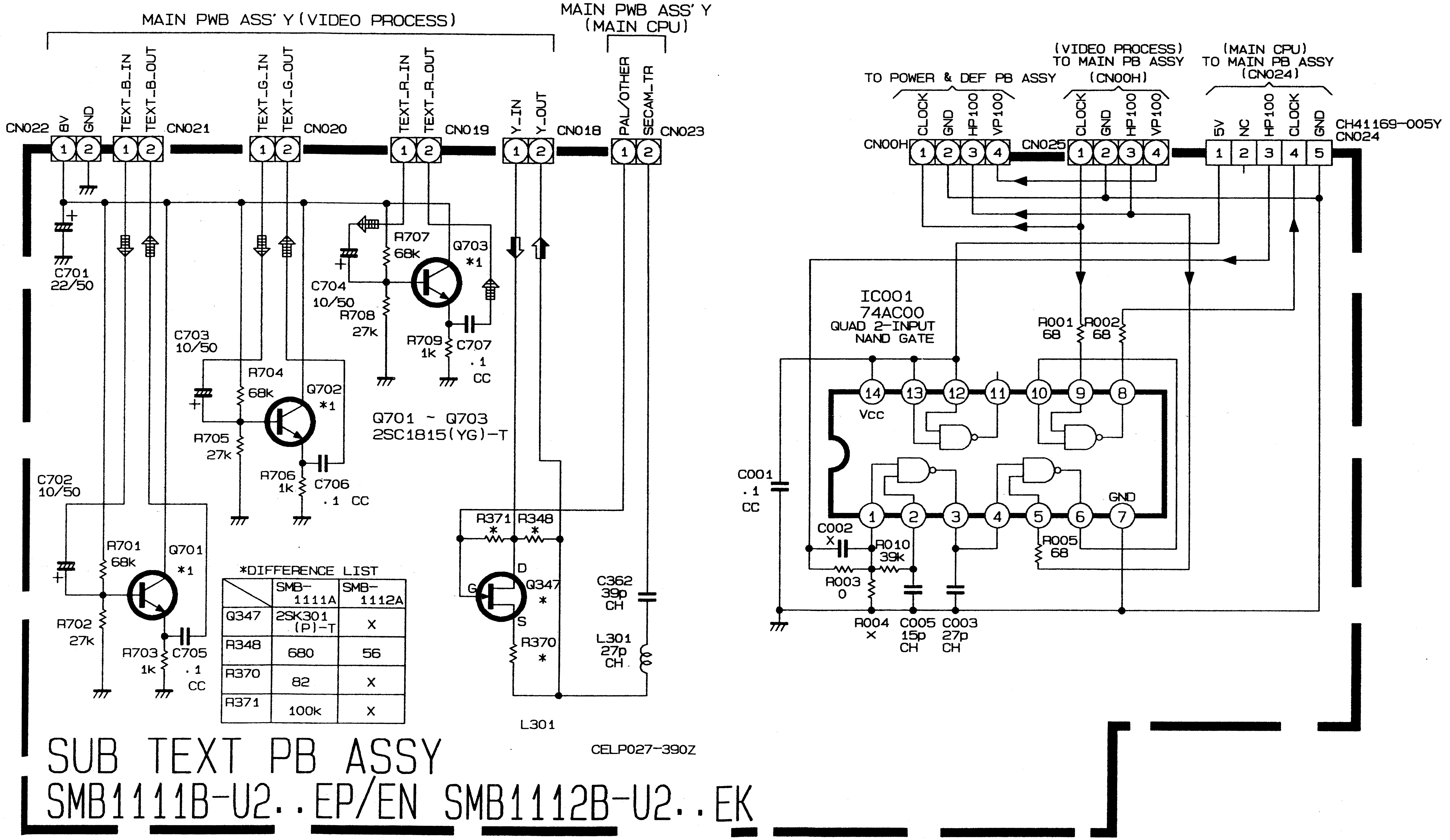
【 DOLBY PWB CIRCUIT DIAGRAM 】


NOTE
0 : 0Ω RESISTOR
X : NON MOUNT(OPEN)
IC101 SAA7367T-X A/D
IC102
TMS57052BFT
DSP
IC103
LC32464M-80X
D-RAM
IC104 PCM1717E-X D/A
IC105 PCM1717E-X D/A
IC201 (1/4) UPC324G2-X LPF
IC201 (2/4) UPC324G2-X LPF
IC201 (3/4) UPC324G2-X LPF
IC201 (4/4) UPC324G2-X LPF
IC202 (1/4) UPC324G2-X LPF
IC202 (2/4) UPC324G2-X LPF
IC202 (3/4) UPC324G2-X LPF
IC202 (4/4) UPC324G2-X LPF
X101 NAX0001-001X 11.2896MHz
D201 MA3062(M)-X
EF101 CE42482-103Y
EF102 CE42482-103Y
EF103 CE42482-103Y
EF104 CE42482-103Y
K101 CE42681-001Y
K102 CE42681-001Y
K106 CE42681-001Y
K107 CE42681-001Y
K108 CE41433-001Z
DOLBY PWB ASS'Y
SMB0D002B-U2(1/2)...32"
28"
D.5V
L2
R2
D.GND
A.5V
C
S
RST
CS
EMPTY
SCK
DATA
A-GND
12V
R1
L1

AV-32WZ2EN
AV-32WZ2EP
AV-28WZ2EN
AV-28WZ2EP


NOTE
0 : 0Ω RESISTOR
X : NON MOUNT(OPEN)
DOLBY PWB ASS'Y
SMB0D002B-U2(2/2)...32"
28"
IC401
TDA7315D
VOL. & TONE
IC431
TDA7315D
CENTRE & REAR
VOL. & TONE
IC301
TC4052BF-X
L. R/CENTRE SW
IC451
BA4558F-X (2/2)
POWER BASS
IC451
BA4558F-X (1/2)
POWER BASS
IC452
BA4558F-X (2/2)
POWER BASS
IC452
BA4558F-X(1/2)
POWER BASS
IC501
BA4558F-X
AMP
IC551
BA4558F-X
AMP
IC111
BA4558F-X
AMP
Q302 DTC144EK-X
Q453
DTC144EK-X
SWITCH
Q451
DTC323TK-X
Q452
DTC323TK-X
Q501
2SA1162(YG)-X
MUTE
Q502
DTC323TK-X
MUTE
Q503
DTC323TK-X
MUTE
Q531
2SA1162(YG)-X
MUTE
Q532
DTC323TK-X
MUTE
Q551
2SA1162(YG)-X
MUTE
Q553
DTC323TK-X
MUTE
CN0LR
CH41169-003Y
CN0CS
CH41169-003Y
J001
AUDIO OUT
CEMN036-004
J002
AUDIO OUT
CEMN061-001
CENTER
SL
SR
CN001
CHB302W-40P-A
(TUNER, AUDIO)
MAIN PWB ASS'Y
L2
R2
D.GND
RST
CS
EMPTY
SCK
DATA
C
S
12V
R1
L1
D.5V
A.5V
SW
SW A L → L3
B L → R3
A H → L2
B L → R2
L1-OUT
R1-OUT
D-GND
RST
CS
EMPTY
SCK
DATA
D-5V
A-5V
L-IN
R-IN
12V
NC
SCL1
SDA1
SDA3
SCL3
POWER BASS
L/R/CENT
9V
R2-OUT
L2-OUT
C-OUT
A-MUTE

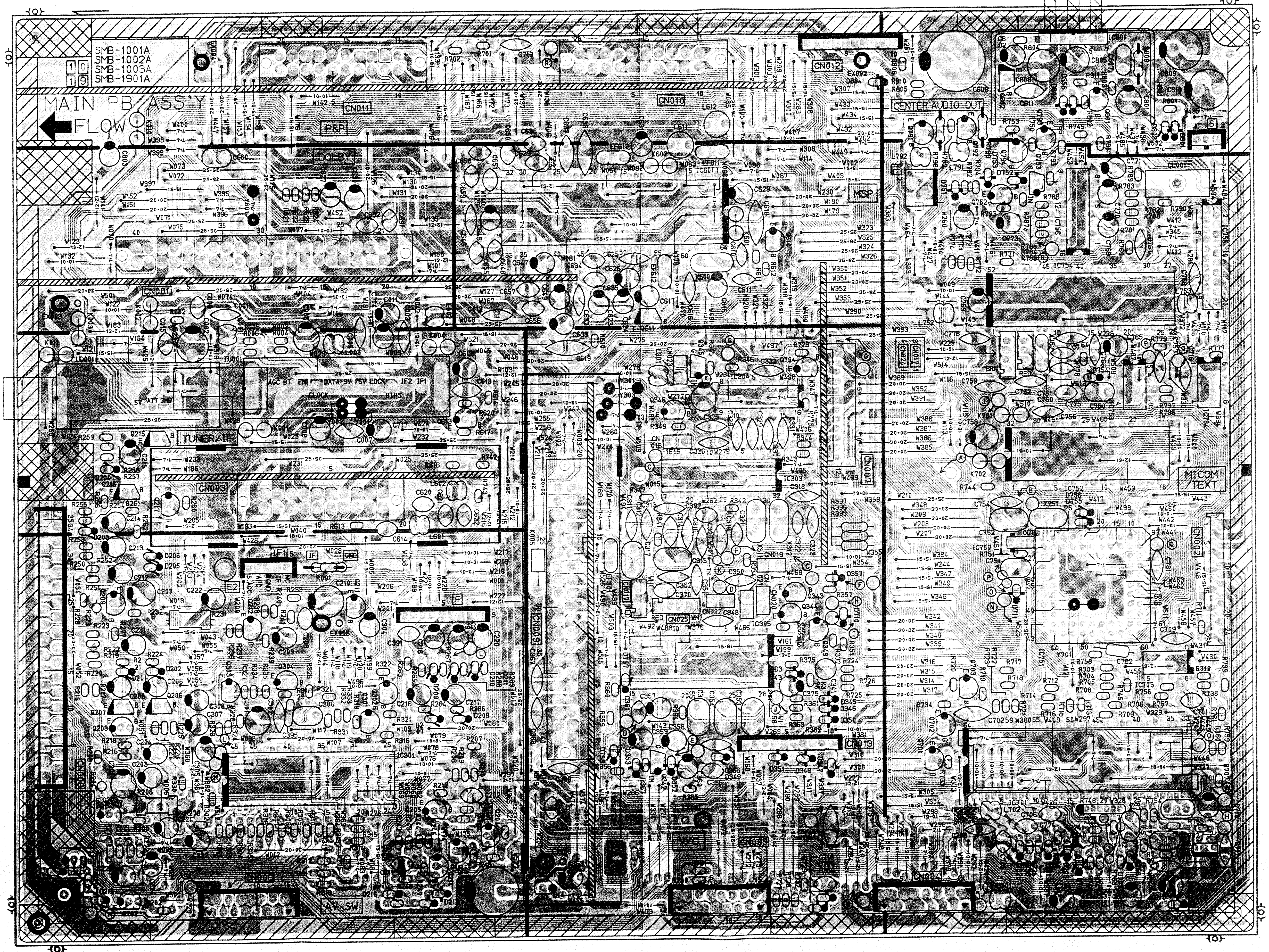
【 SUB TEXT PWB CIRCUIT DIAGRAM 】


MAIN PWB ASS' Y (VIDEO PROCESS)
MAIN PWB ASS' Y (MAIN CPU)
CN022
9V
GND
TEXT_B_IN
TEXT_B_OUT
CN021
TEXT_G_IN
TEXT_G_OUT
CN020
TEXT_R_IN
TEXT_R_OUT
CN019
Y_IN
Y_OUT
CN018
PAL/OTHER
SECAM_TR
CN023
C701 22/50
C702 10/50
R701 68k
R702 27k
R703 1k
C705 .1 CC
Q701 *1
C703 10/50
R704 68k
R705 27k
R706 1k
C706 .1 CC
Q702 *1
C704 10/50
R707 68k
R708 27k
R709 1k
C707 .1 CC
Q703 *1
Q701 ~ Q703
2SC1815(YG)-T
R371 *
R348 *
Q347 *
D
G
S
R370 *
C362 39p CH
L301 27p CH
L301
CELP027-390Z
TO POWER & DEF PB ASSY
(VIDEO PROCESS) TO MAIN PB ASSY (CN00H)
(MAIN CPU) TO MAIN PB ASSY (CN024)
CN00H
CLOCK
GND
HP100
VP100
CN025
CLOCK
GND
HP100
VP100
5V
NC
HP100
CLOCK
GND
CH41169-005Y
CN024
IC001
74AC00
QUAD 2-INPUT NAND GATE
Vcc
GND
R001 68
R002 68
C001 .1 CC
C002 X
R010 39k
R003 0
R004 X
C005 15p CH
C003 27p CH
R005 68
SUB TEXT PB ASSY
SMB1111B-U2..EP/EN SMB1112B-U2..EK

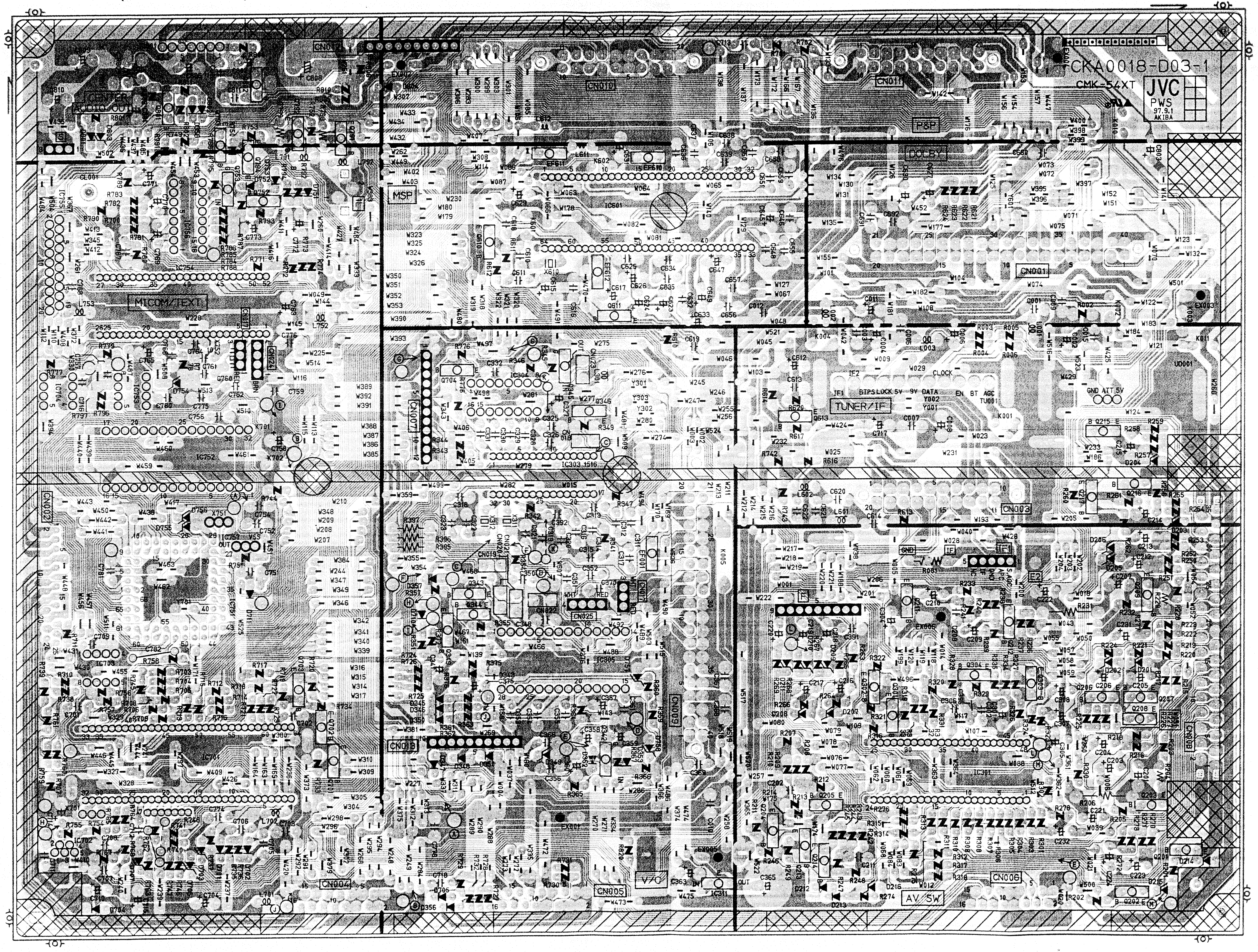
*DIFFERENCE LIST

	SMB-1111A	SMB-1112A
Q347	2SK301 (P)-T	X
R348	680	56
R370	82	X
R371	100k	X

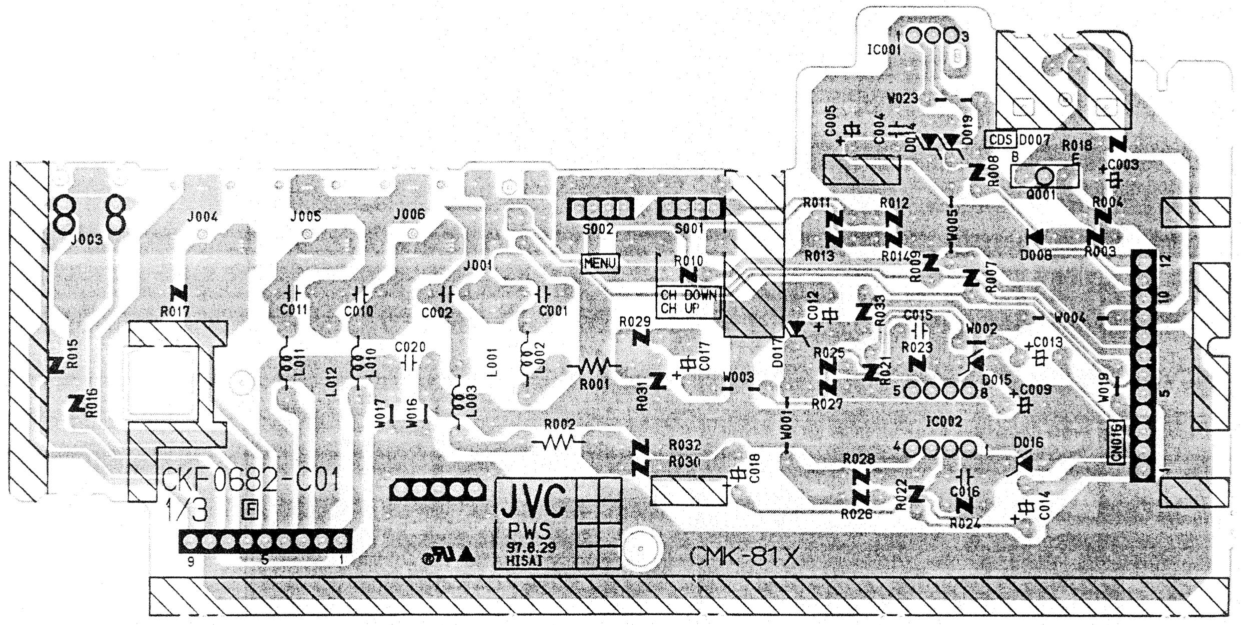
【 MAIN PWB PATTERN (PARTS SIDE) 】


MAIN PB ASS'Y
FLOW
SMB-1001A
SMB-1002A
SMB-1003A
SMB-1901A
CN011
CN010
CN012
CENTER AUDIO OUT
DOLBY
P&P
MSP
CN001
TUNER/IF
CN003
CN009
CN007
CN002
MICOM /TEXT
CN013
CN008
CN004
AV SW
IC601
IC754
IC752
IC703
IC701
IC801

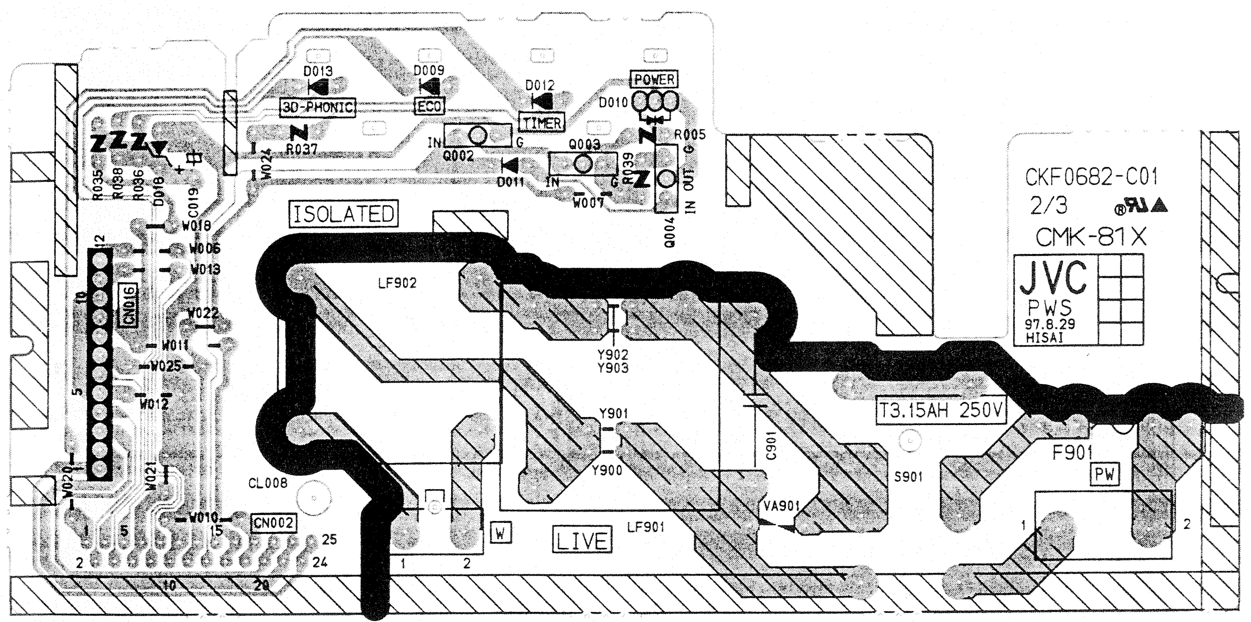
【 MAIN PWB PATTERN (SOLDER SIDE) 】


CKA0018-D03-1
CMK-54XT
JVC
PWS
97.9.1
AKIBA
CENTER AUDIO OUT
MICOM/TEXT
MSP
PSP
DOLBY
TUNER/IF
AV SW
V/C
CN001
CN002
CN003
CN004
CN005
CN006
CN007
CN008
CN009
CN010
CN011
CN012
CN013
CN025
IC601
IC301
IC303
IC305
IC752
IC754
GND ATT 5V
BTPSLOCK 5V 9V DATA CLOCK EN BT AGC
IF1 IF2
EX001
EX003
EX004
EX005
EX007

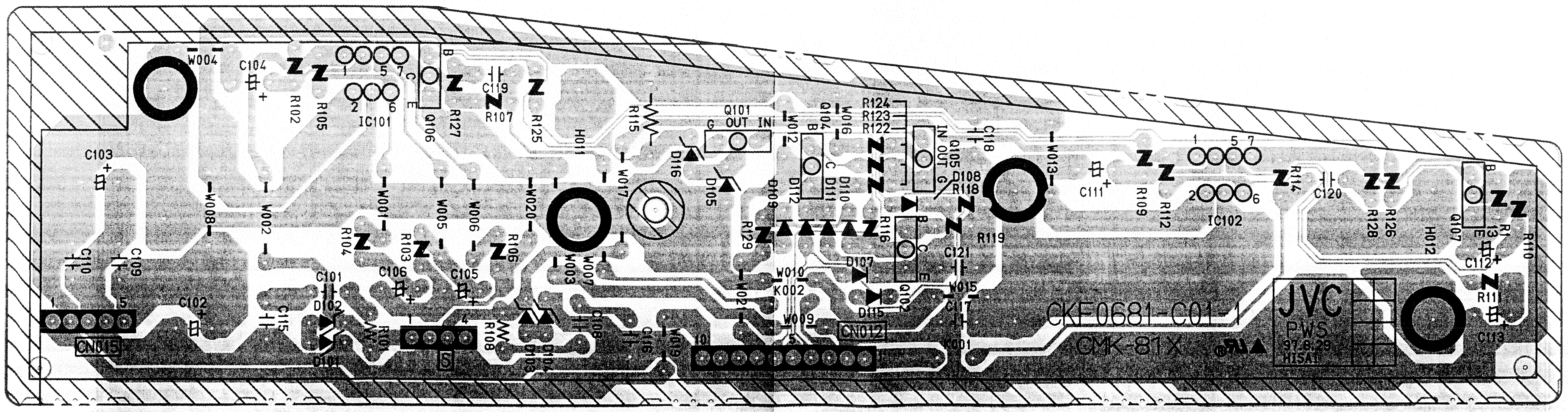
【 FRONT CONTROL PWB PATTERN 1 】


IC001
J003
J004
J005
J006
J001
S002
S001
MENU
CH DOWN
CH UP
R010
R011
R012
R013
R014
R015
R016
R017
R001
R002
R029
R030
R031
R032
C001
C002
C010
C011
C020
L001
L002
L003
L010
L011
L012
W016
W017
W003
W001
W002
W004
W005
W019
W023
IC002
CN016
D007
D008
D015
D016
D017
D019
Q001
CDS
CKF0682-C01
1/3
JVC
PWS
97.8.29
HISAI
CMK-81X

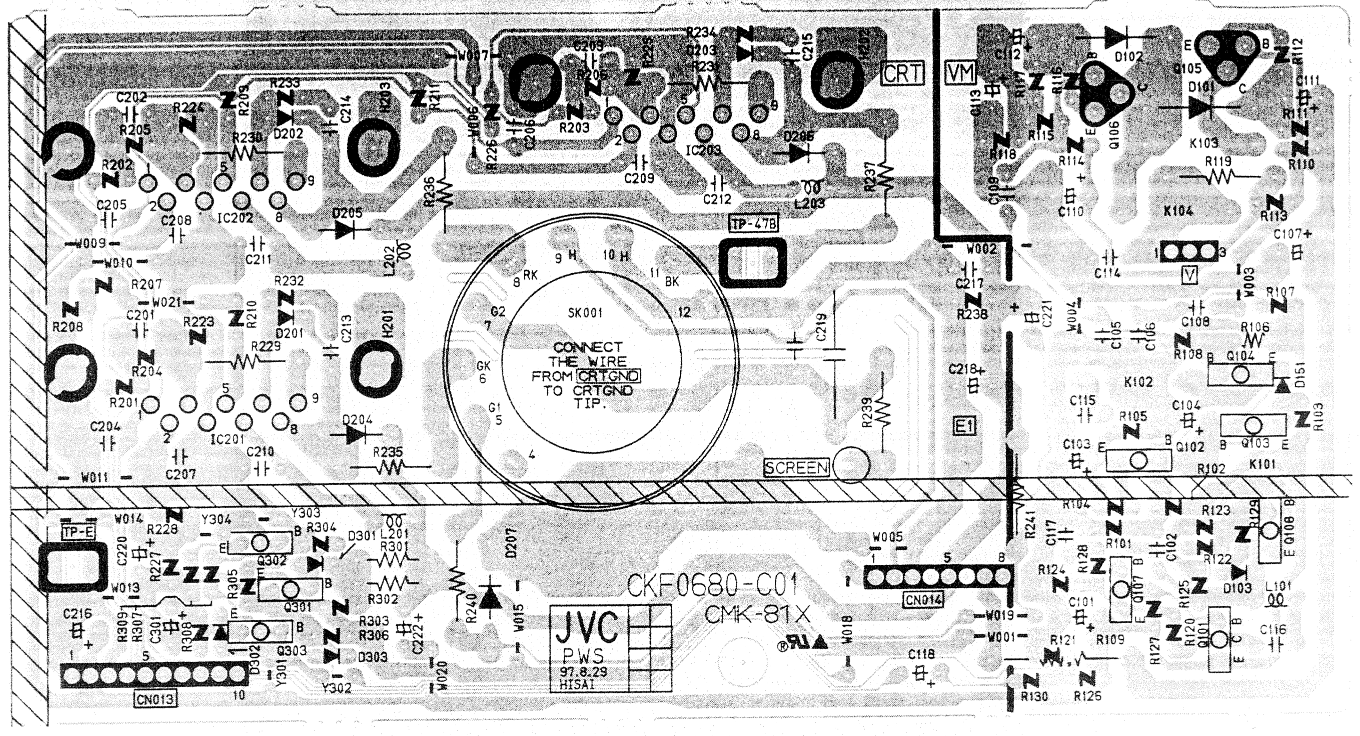
【 FRONT CONTROL PWB PATTERN 2 】


D013
D009
D012
D010
D011
3D-PHONIC
ECO
TIMER
POWER
Q002
Q003
Q004
R005
R035
R037
R039
W007
W006
W010
W011
W012
W013
W018
W020
W021
W022
W024
W025
ISOLATED
LF902
LF901
Y900
Y901
Y902
Y903
C901
VA901
S901
F901
T3.15AH 250V
PW
CN016
CN002
CL008
LIVE
W
CKF0682-C01
2/3
CMK-81X
JVC
PWS
97.8.29
HISAI

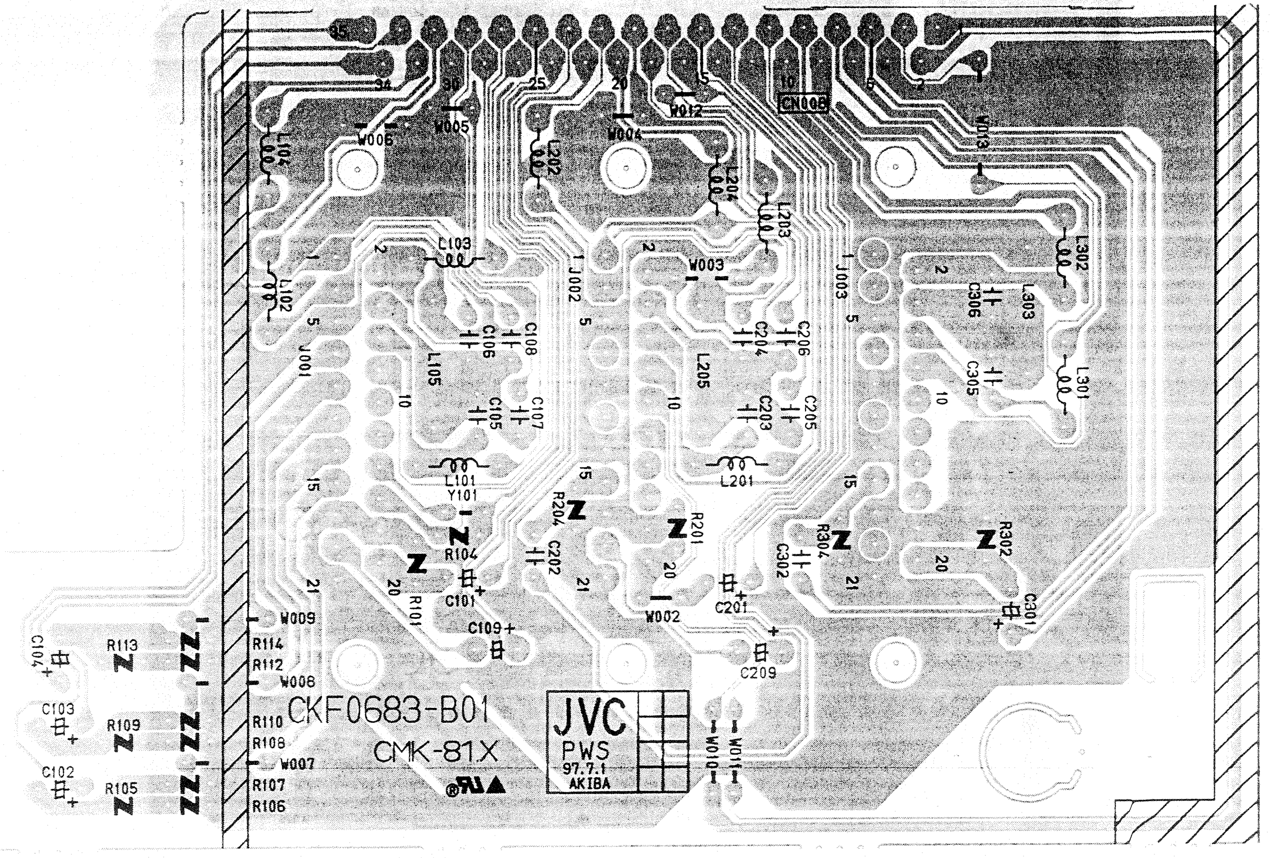
【 AUDIO PWB PATTERN 】


W004
C104
R102
R105
IC101
Q106
R127
C119
R107
R125
H011
R115
Q101
OUT
IN
W012
Q104
W016
R124
R123
R122
Q105
C118
W013
C111
R109
R112
IC102
R114
C120
R128
R126
H012
Q107
R110
C103
W008
W002
W001
W005
W006
W020
W017
D116
D105
D109
D112
D111
D110
D108
R118
R119
R104
R103
R106
W003
W007
R129
R116
D107
C121
W015
C110
C109
C101
C106
C105
C102
D102
C115
D101
R101
R108
D103
D104
D115
Q102
C117
W010
K002
W009
W019
CN015
CN012
C112
R111
C113
CKF0681-C01-1
CMK-81X
JVC
PWS
97.8.29
HISAI

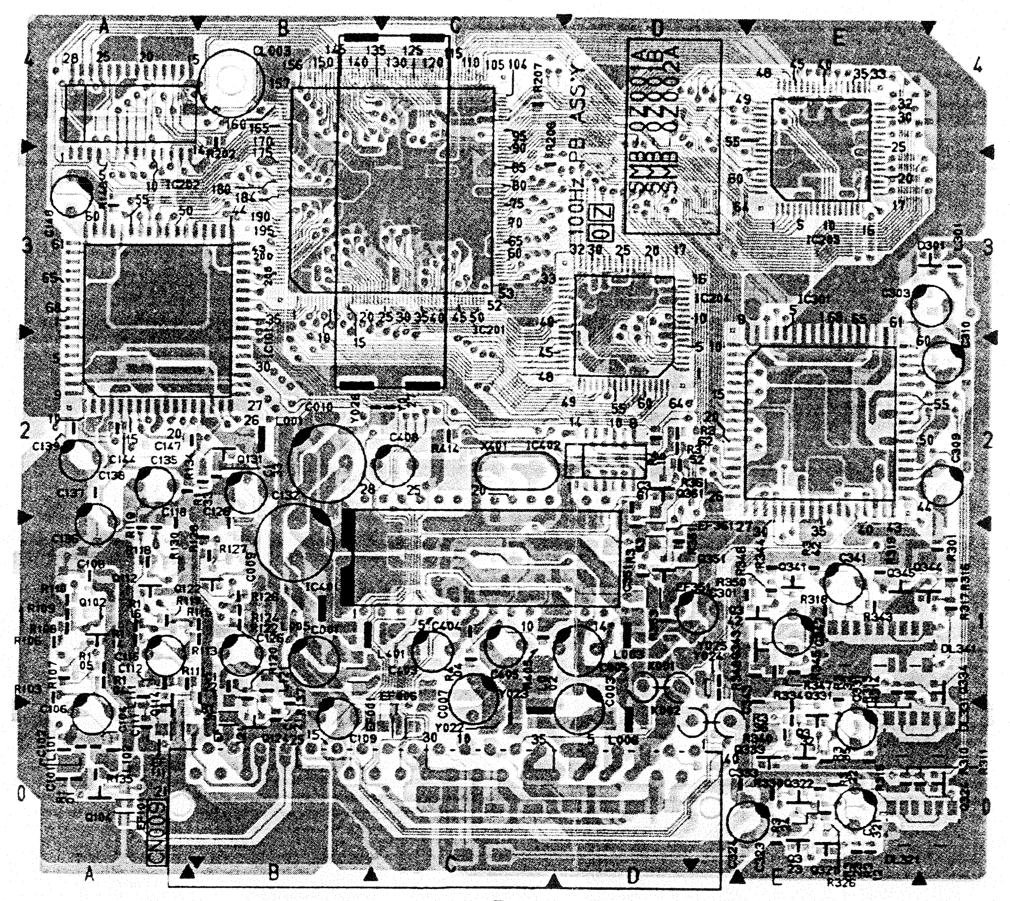
【 CRT SOCKET PWB PATTERN 】


CRT
VM
SK001
CONNECT
THE WIRE
FROM CRTGND
TO CRTGND
TIP.
SCREEN
TP-47B
TP-E
E1
CN013
CN014
CKF0680-C01
CMK-81X
JVC
PWS
97.8.29
HISAI

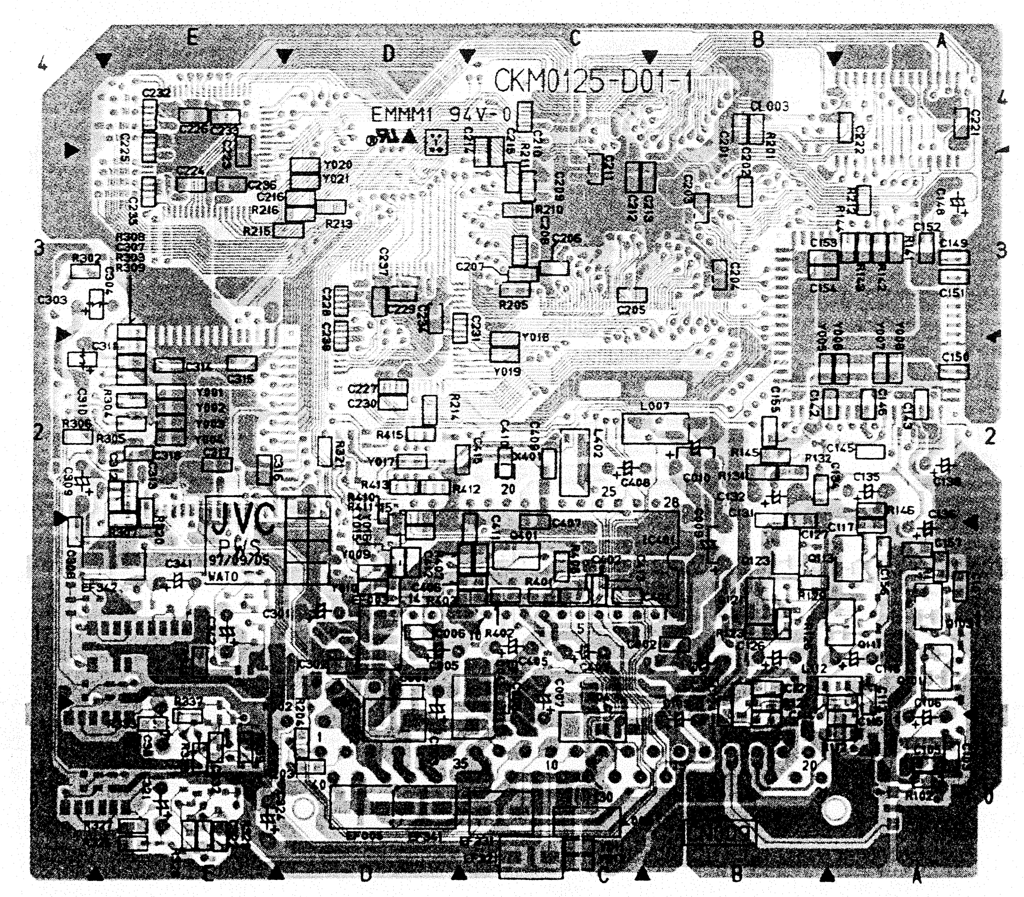
【 AV TER. PWB PATTERN 】


CN008
J001
J002
J003
CKF0683-B01
CMK-81X
JVC
PWS
97.7.1
AKIBA

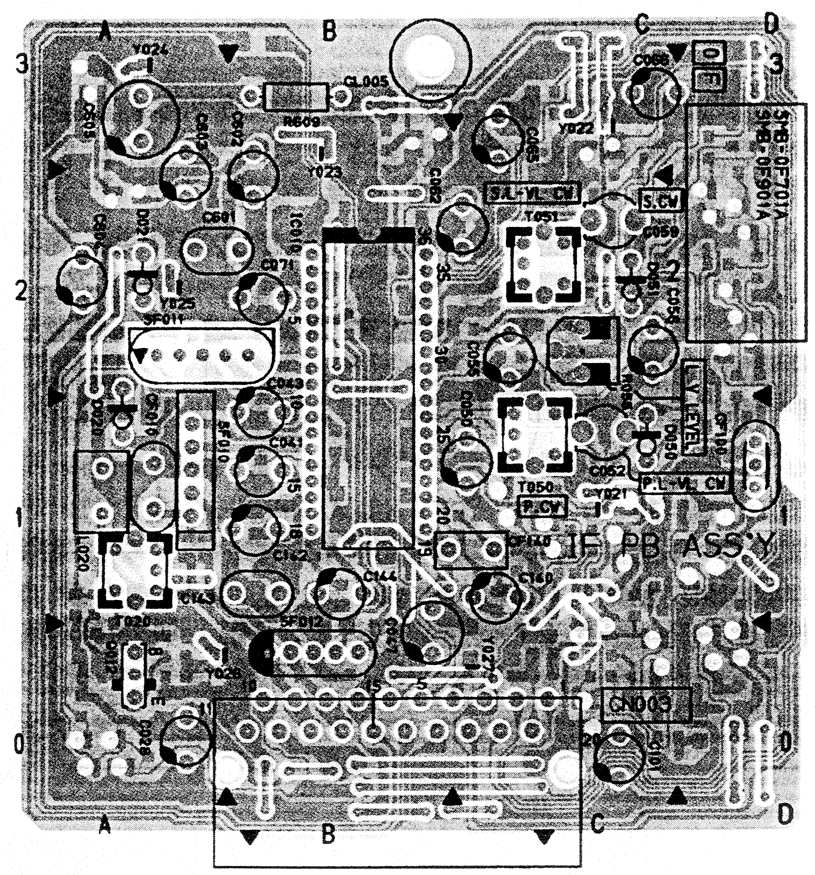
【 100Hz PWB PATTERN (TOP VIEW) 】


100Hz PB ASS'Y
A
B
C
D
E
0
1
2
3
4

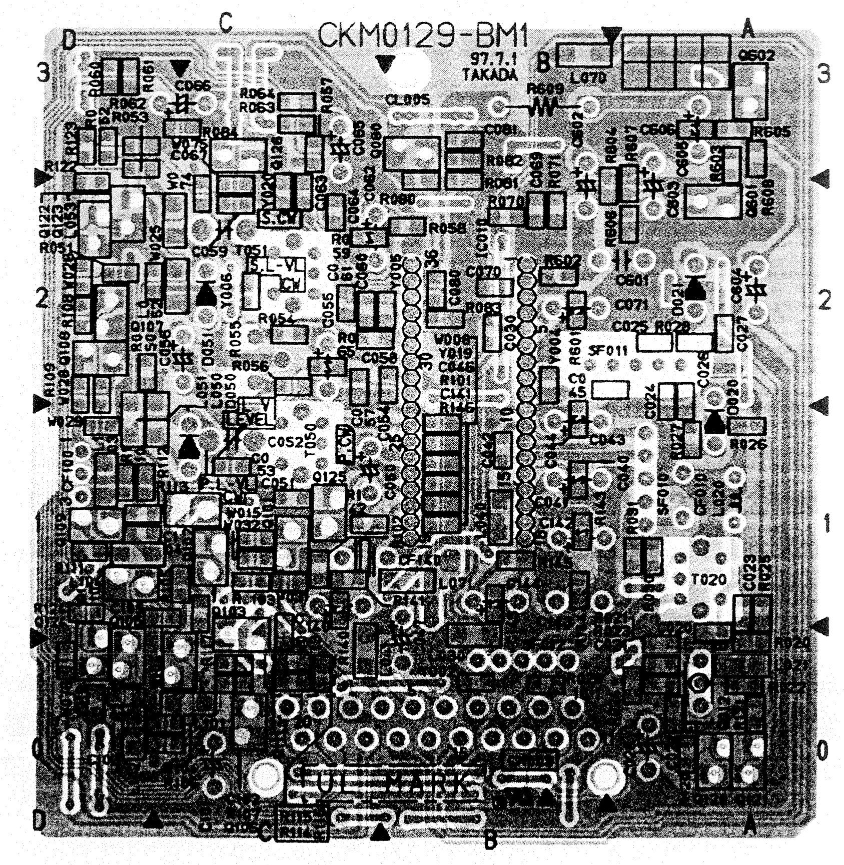
【 100Hz PWB PATTERN (BOTTOM VIEW) 】


CKM0125-D01-1
EMMM1 94V-0
JVC
A
B
C
D
E
0
1
2
3
4

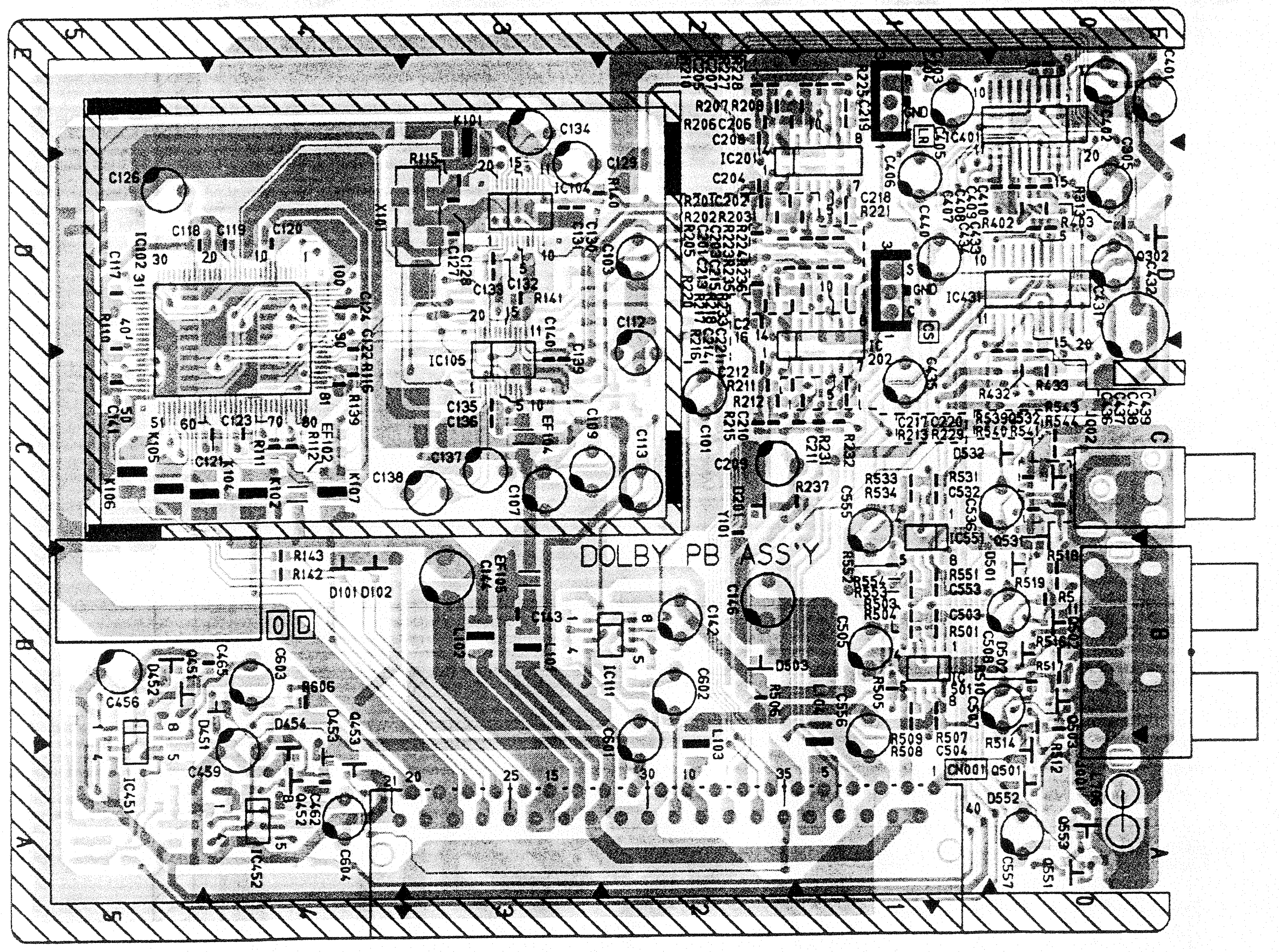
【 IF PWB PATTERN (TOP VIEW) 】


IF PB ASS'Y
A
B
C
D
0
1
2
3

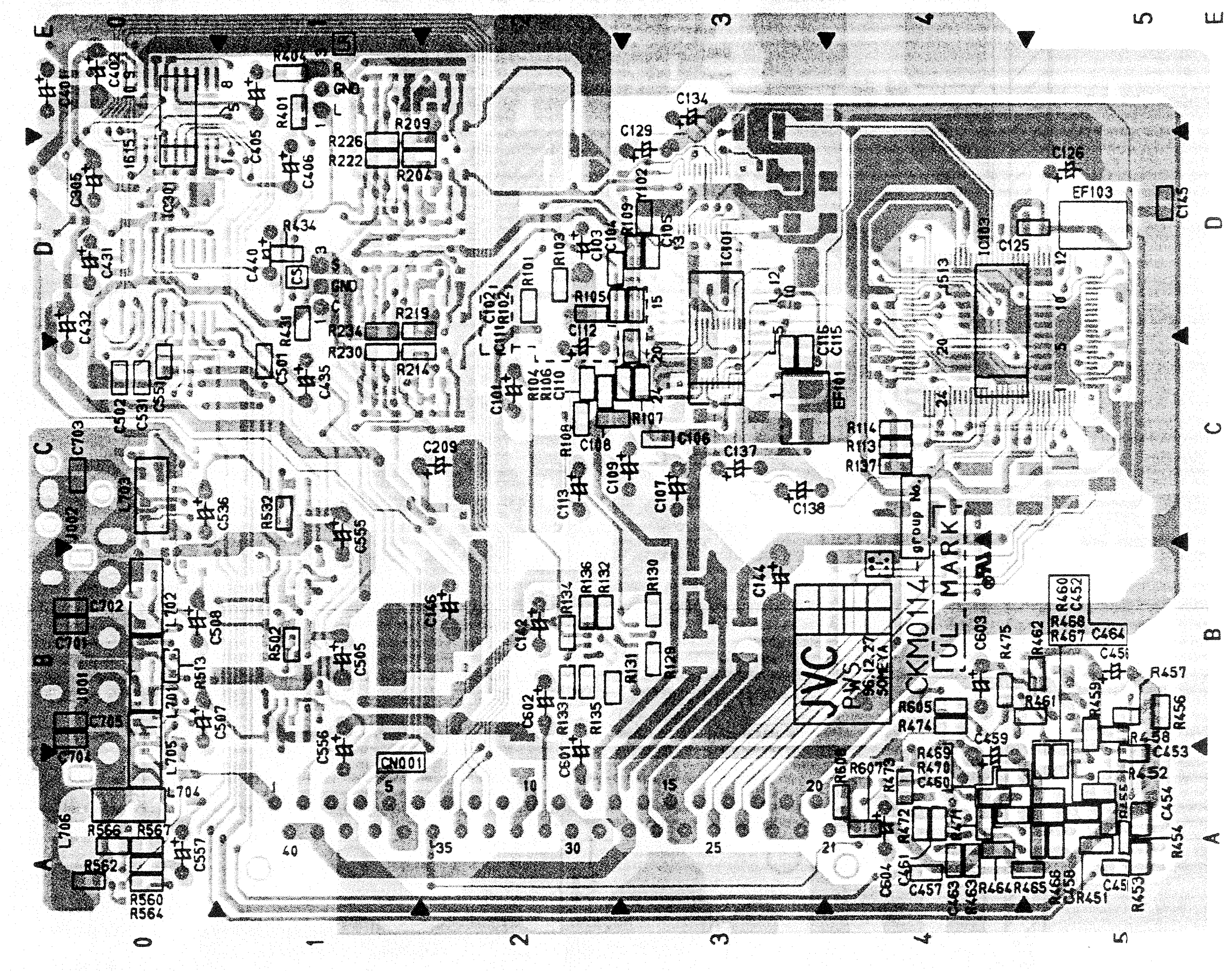
【 IF PWB PATTERN (BOTTOM VIEW) 】


CKM0129-BM1
97.7.1
TAKADA
A
B
C
D
0
1
2
3

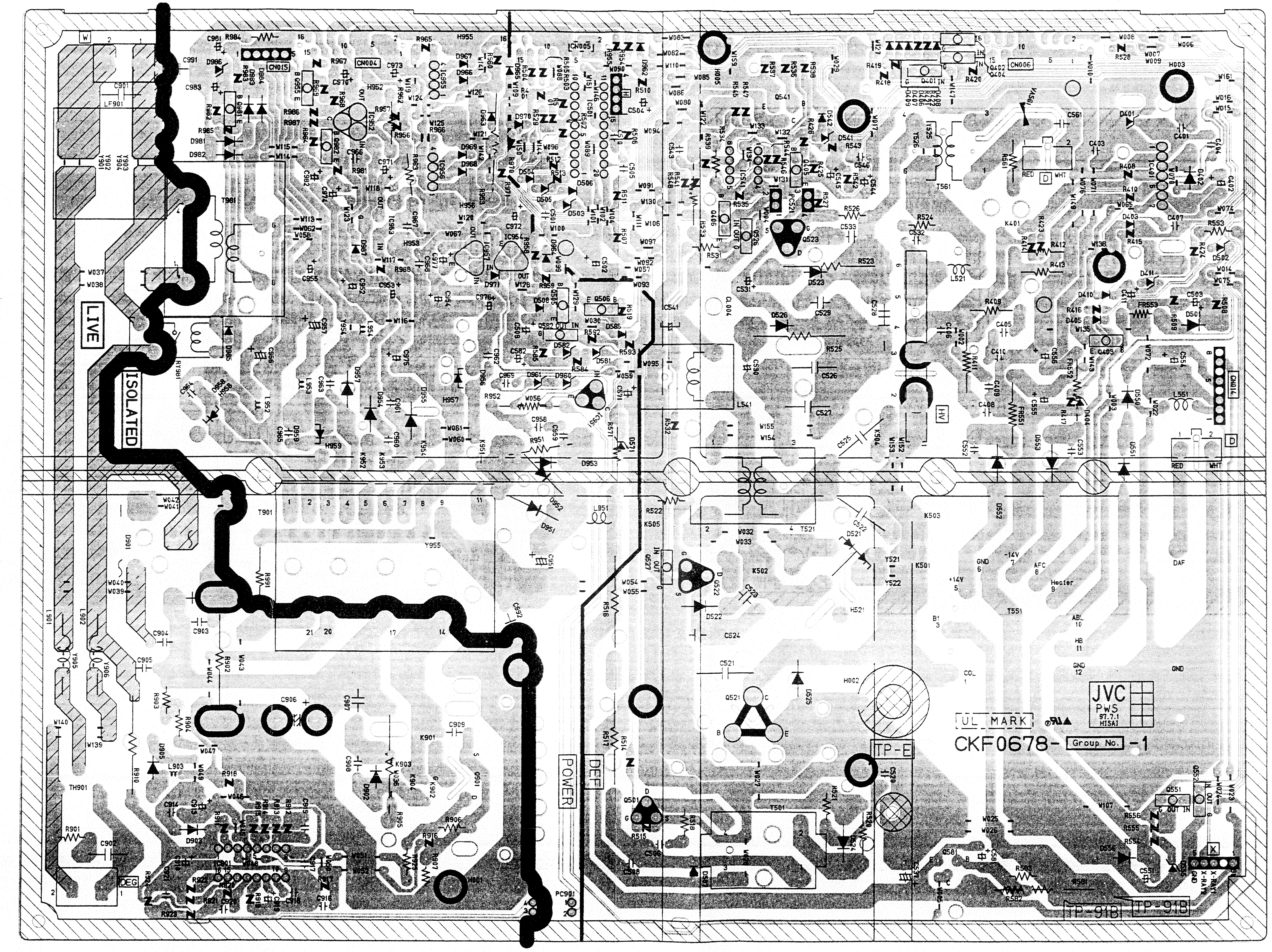
【 DOLBY PWB PATTERN (TOP VIEW) 】


DOLBY PB ASS'Y
IC101
IC104
IC105
IC111
IC201
IC202
IC401
IC431
IC451
IC452
CN001
K101
EF102
EF104
Y101
Y102
X101
A
B
C
D
E
0
1
2
3
4
5

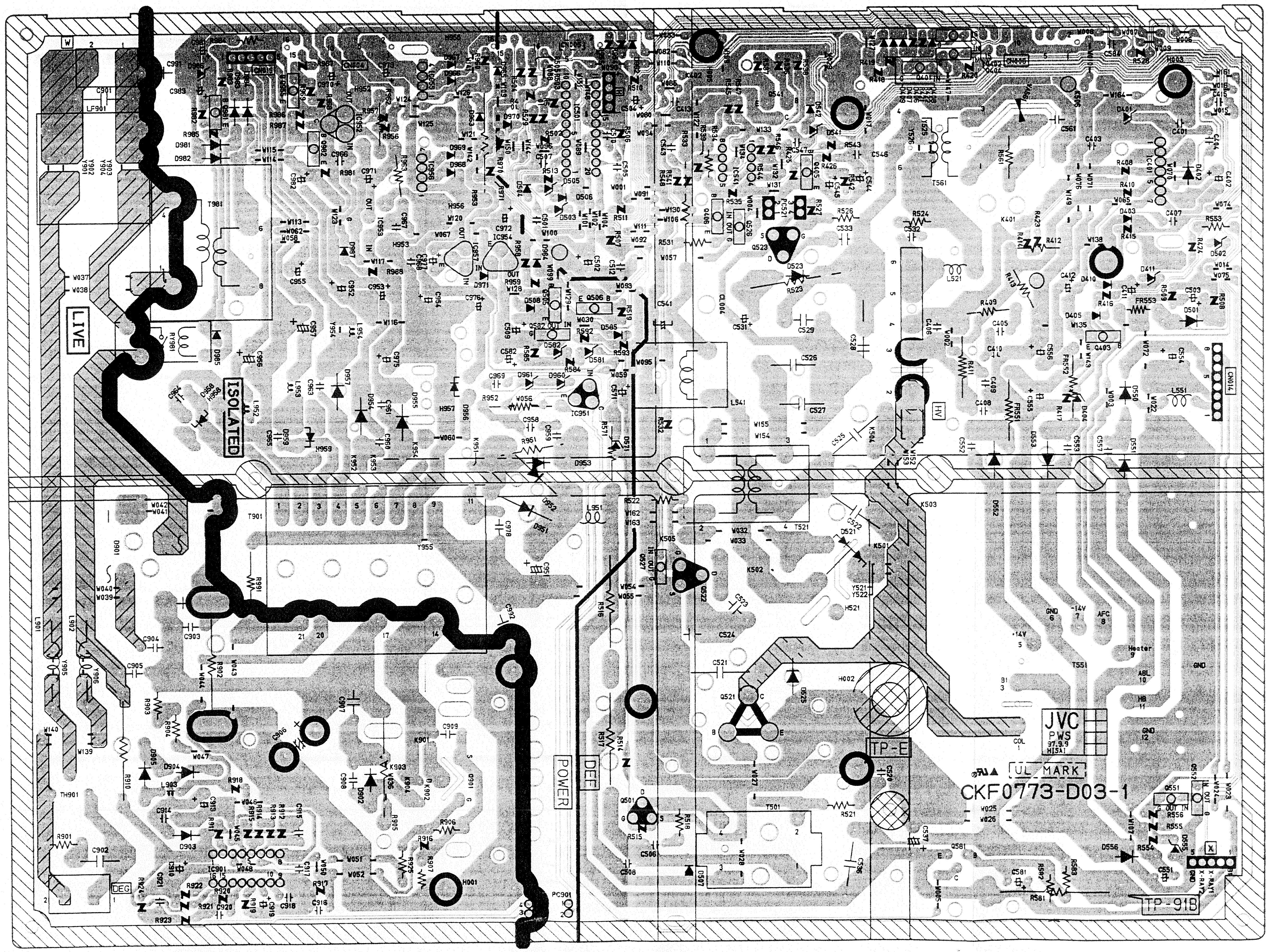
【 DOLBY PWB PATTERN (BOTTOM VIEW) 】


JVC
CKM0114
UL MARK
CN001
EF101
EF103
IC101
IC102
IC103
A
B
C
D
E
0
1
2
3
4
5

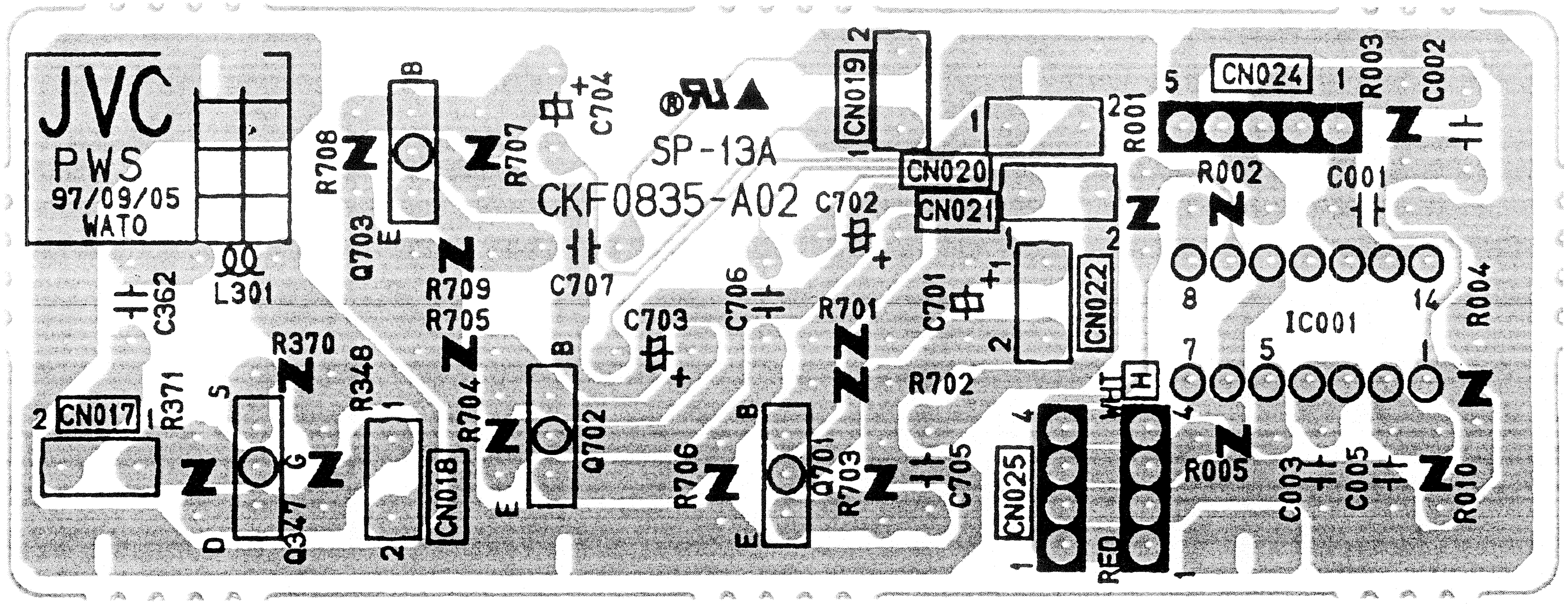
【 POWER DEF PWB PATTERN (32 INCH MODEL) 】


LIVE
ISOLATED
POWER
DEF
HV
UL MARK
JVC
PWS
97.7.1
HISAI
CKF0678- Group No. -1
TP-E
TP-91B
TP-91B
RED
WHT
CN004
CN005
CN006
CN014
CN015
T901
T521
T551
T561
T501

【 POWER DEF PWB PATTERN (28 INCH MODEL) 】


LIVE
ISOLATED
POWER
DEF
HV
TP-E
TP-91B
JVC
PWS
UL MARK
CKF0773-D03-1
T901
T981
T521
T551
T501
LF901
IC951
IC954
IC959
Q521
Q501
GND
-14V
+14V
AFC
Heater
ABL
HB
COL
CN014

【 SUB TEXT PWB PATTERN 】


JVC
PWS
97/09/05
WATO
SP-13A
CKF0835-A02
CN017
CN018
CN019
CN020
CN021
CN022
CN024
CN025
IC001
Q347
Q701
Q702
Q703
L301
C362
C701
C702
C703
C704
C705
C706
C707
C001
C002
C003
C005
R001
R002
R003
R004
R005
R010
R348
R370
R371
R701
R702
R703
R704
R705
R706
R707
R708
R709
WHT
RED
B
E
S
G
D

SPECIFICATIONS

Model / Item	AV-32WP2EP	AV-32WZ2EP	AV-28WZ2EP
TV RF systems	CCIR L, B/G, I		
Colour systems	PAL, SECAM (NTSC 3.58 / 4.43 MHz only in EXT modes)		
Channels and frequencies	F2-F10, F21-F69, E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2 * Receives French cable TV channel frequencies 116-172 MHz and 220-469MHz		
Sound-multiplex systems	A2/NICAM (B/G, L) system		
Teletext systems	Fastext (United Kingdom system) / TOP (German system) / WST (standard system)		
Power requirements	AC 220 – 240 V, 50 Hz		
Power consumption	Maximum 266 W, Average 161 W, Standby 0.8 W	Maximum 248 W, Average 151 W, Standby 0.8 W	Maximum 242 W, Average 147 W, Standby 0.8 W
Picture tube size	Visible area 76 cm (measured diagonally)		Visible area 66 cm (measured diagonally)
Audio output	Rated Power output 20 W + 20 W + 5 W	Rated Power output 20 W + 20 W	
Speakers	10 cm round × 2, 3.5 cm round × 2, (10 cm × 3 cm oval) × 1	10 cm round × 2, 3.5 cm round × 2	
External input / output	EXT-1, EXT-2, EXT-3	21-pin Euroconnector (SCART)	
	EXT-4	VIDEO IN (RCA) AUDIO L / R IN (RCA) S-VIDEO IN (Mini Din 4-pin)	
	AUDIO OUT	(Variable out (0-1 Vrms), low impedance) CENTRE output (RCA) FRONT L/R output (RCA) SURROUND REAR L/R output (RCA)	
	Headphone jack (stereo mini jack, dia. 3.5 mm)		
Dimensions (W × H × D)	805 mm × 550 mm × 550 mm		716 mm × 489 mm × 496 mm
Weight	50.3 kg	50.2 kg	36.3 kg
Accessories	Remote control unit RM-C791 × 1 AAA (R03) dry cell battery × 2	Remote control unit RM-C793 × 1 AAA (R03) dry cell battery × 2	

Design and specifications subject to change without notice.

Pictures displayed on the screen using this TV's image-processing functions should not be shown for any commercial or demonstration purpose in public places (tearooms and halls in hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this constitutes an infringement of copyright.

JVC

VICTOR COMPANY OF JAPAN, LIMITED

JVC

OPERATING INSTRUCTIONS

COLOUR TELEVISION

AV-32WP2EN / EP
AV-32WZ2EN / EP
AV-28WZ2EN / EP

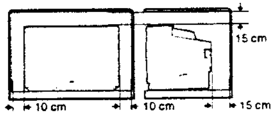
INSTRUCTIONS

Thank you for purchasing this JVC colour television.
To ensure your complete understanding, please read this manual thoroughly before operation.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:
TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified (AC 220 – 240 V, 50 Hz) on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
   When installing this television, distance recommendations must be maintained between the floor and wall, as well as instalment in a tightly enclosed area or piece of furniture. Adhere to the minimum distance guidelines shown for safe operation.



4. Do not allow objects or liquid into the cabinet openings.
5. In the event of a fault, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

When you don't use this TV set for a long period of time, be sure to disconnect the power plug from the AC outlet.

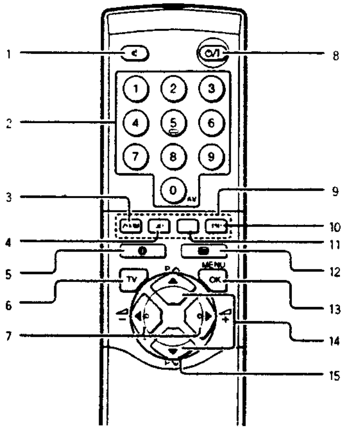
CONTENTS

Locations of remote control buttons 2
Locations of TV buttons and parts 3
PREPARATION AND BASIC OPERATION 4
SOUND AND PICTURE 11
OTHER FEATURES 16
TELETEXT 18
SURROUND SOUND 20
OTHER PREPARATION 22
CONNECTING AMPLIFIRES AND SPEAKERS 27
TROUBLESHOOTING 29
SPECIFICATIONS 33

AV-32WZ2EN
AV-32WZ2EP
AV-28WZ2EN
AV-28WZ2EP

Locations of remote control buttons

OUTSIDE BUTTONS



①	Mute button	p.11
②	Number buttons	p.7
③	ZOOM button	p.13
④	3D button	p.20
⑤	Information button	p.16
⑥	TV button	
⑦	Volume –/+ buttons	p.8
⑧	Standby button	p.6, 8
⑨	Colour buttons	
⑩	PIP button (AV-32WP2EN and AV-32WP2EP only.)	p.14
⑪	P. BASS button	p.11
⑫	TV/text button	p.18
⑬	OK button	
⑭	PR channel V/Λ buttons	p.7
⑮	◀/▶ / ▼/▲ buttons	
⑯	Teletext/VCR control buttons	p.18

⑰ VCR/TEXT selector switch

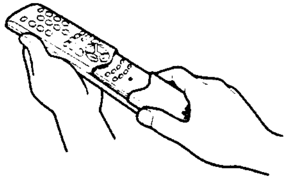
- When switched to the VCR side, the 16 buttons function as the JVC VCR control buttons.

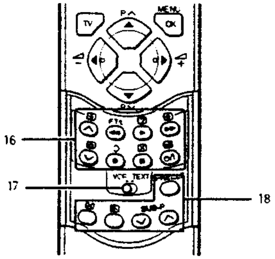
  Notes:
  - For details on button functions, see the JVC VCR manual.
  - Depending on your VCR, the remote control may not operate perfectly, and may not even control the VCR at all.
- When switched to the TEXT side, the 16 buttons function as teletext control buttons.

⑱ PIP control buttons p.14
(AV-32WP2EN and AV-32WP2EP only.)

INSIDE BUTTONS

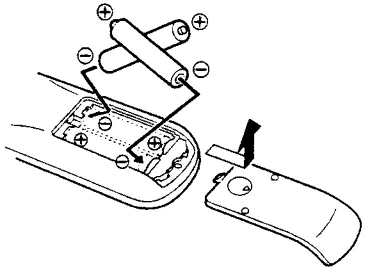
How to open the cover.





Inserting batteries into your remote control

Use two AAA/R03 dry cell batteries.
Insert two batteries, observing the ⊕ and ⊖ polarities, inserting the ⊖ end first.

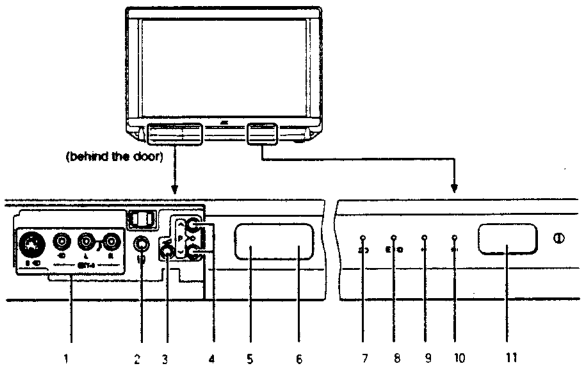


CAUTION:
- Follow the cautions printed on the batteries.

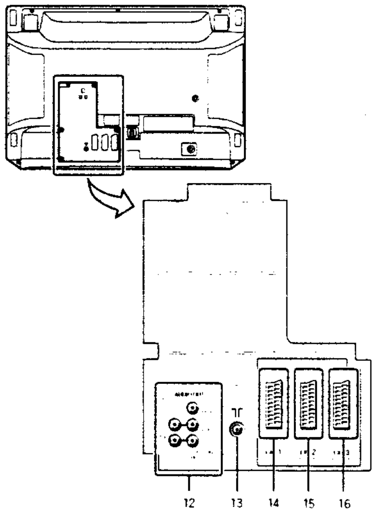
Notes:
- Battery life is approx. six months to one year, depending on frequency of use.
- If the remote control operates erratically, replace the batteries.
- We recommend that you use the supplied batteries temporarily and replace them as soon as operation becomes erratic. The supplied batteries are for operational testing of the remote control, not for regular use.

Locations of TV buttons and parts

FRONT PANEL



REAR PANEL

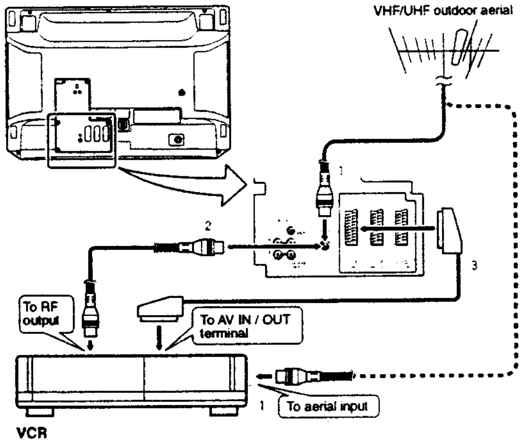


①	EXT-4 terminals	p.4, 22
②	Headphone jack (mini jack)	p.5
③	Volume button (Press this button to display the volume level indicator. Press the 4 Up/down buttons to change volume while the volume level indicator is displayed.)	p.9
④	Up/down buttons (You can use this button as the V/Λ buttons of the PR channel. Pressing the 3 Volume button makes this button function as the Volume –/+ buttons.)	p.9
⑤	Remote control sensor	
⑥	ECO sensor	
⑦	3D lamp	p.20
⑧	ECO lamp	p.12
⑨	Sleep timer lamp	p.16
⑩	Power lamp	p.6, 8
⑪	Main power button	p.6, 8
⑫	AUDIO OUT terminals	p.27
⑬	Aerial socket	p.4
⑭	EXT-1 terminal	p.4, 22
⑮	EXT-2 terminal	p.4, 22
⑯	EXT-3 terminal	p.4, 22

PREPARATION AND BASIC OPERATION

1. Connecting the aerial and VCR

If not connecting a VCR, do 1 only.
If connecting a VCR, proceed 1 → 2 → 3.


VHF/UHF outdoor aerial
1
2
3
To RF output
To AV IN / OUT terminal
To aerial input
VCR

Notes:

- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- You can view video from a VCR without doing 3. For details, refer to the manual provided with your VCR.
- Connect the S-VHS VCR to either the EXT-2 or EXT-3 connector.
  When the S-VHS VCR is connected to the EXT-1 connector, S-VIDEO input can not be selected.

2. Connecting other external devices

Conditions:

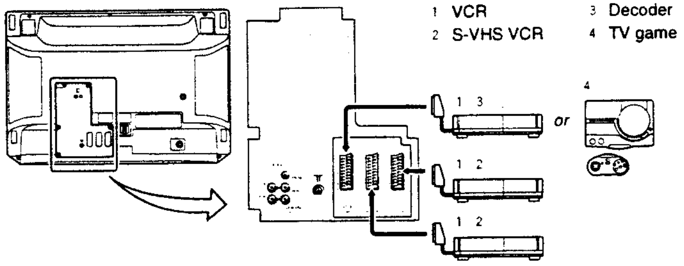
- This TV set has external device connectors, EXT-1 to EXT-4 to which you can connect a VCR. However, there are some differences in functions among them. Consult the following table before making connections.

	EXT-1	EXT-2	EXT-3	EXT-4 (front)
VIDEO IN	✓	✓ *1	✓ *1	✓ *1
VIDEO OUT	✓ *2	✓ *3	–	–
S-VIDEO IN	–	✓ *1	✓ *1	✓ *1
S-VIDEO OUT	–	–	–	–
RGB IN	✓	–	–	–
AUDIO-L IN	✓	✓	✓	✓
AUDIO-R IN	✓	✓	✓	✓
AUDIO-L OUT	✓ *2	✓ *3	–	–
AUDIO-R OUT	✓ *2	✓ *3	–	–
Others	• Automatic detection and switching of input mode. • Automatic detection and switching of ZOOM mode.			

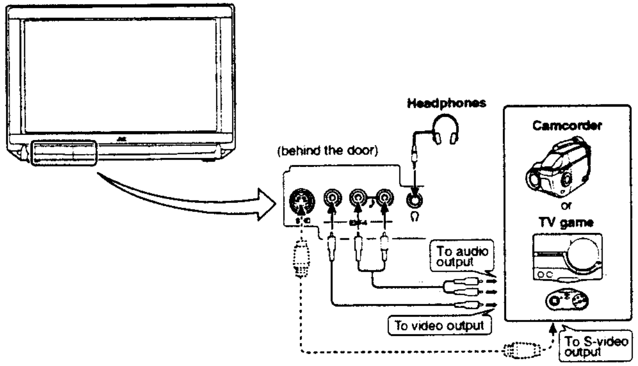
*1 Select VIDEO or S-VIDEO mode from the EXT SETTING menu. For details, see page 22 "EXT SETTING".
*2 Only the TV broadcast is output. Even when a SUB picture is displayed, the output TV broadcast PR channel does not change. However, when another PR channel is being watched in the SUB picture, if the SWAP function is used the output TV broadcast PR channel is switched.
*3 TV broadcasts or inputs from EXT-1, 3 or 4 can be output. For details, see page 22 "DUBBING".

- Use headphones with a stereo mini jack (dia. 3.5 mm).
  When using headphones, refer to "To listen to the sound using headphones" on page 8.
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- For details on how to connect the AUDIO OUT terminals on your TV and external devices such as the audio amplifiers or speakers, see page 27.

Devices which can be connected to the terminals on the rear panel

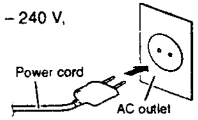

1 VCR
2 S-VHS VCR
3 Decoder
4 TV game
1 3
1 2
1 2
4
or

Devices which can be connected to the terminals on the front panel


Headphones
(behind the door)
Camcorder
or
TV game
To audio output
To video output
To S-video output

3. Connecting the power cord

Insert the power plug into an AC outlet (AC 220 – 240 V, 50 Hz).


Power cord
AC outlet

4. Turning the power and TV on

1. Press the Main power button on the TV to turn the power on.

The Power lamp lights red (power on), then green (TV on).

If the power lamp stays red and does not change to green:
Your TV is in the standby mode. Press the Standby button on the remote control to turn your TV on.

Note:
- You can also press the PR channel V/Λ button, a number button or the up/down button on the front panel to turn the TV on.

5. Initial Settings

- When the TV is first turned ON, it enters into the initial setting mode, and the JVC logo is displayed.

Note:
- The TV enters into the initial setting mode only once when the TV is first turned ON. If you turn the TV off or exit from the setting menu while performing the initial settings by mistake, you must redo the initial settings, "LANGUAGE" and "AUTO PROGRAM", following the procedures described in page 23.

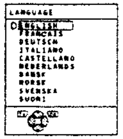
1. Press any button on the remote control.

Language menu appears.

Selecting the on-screen language

You can select your language from ten languages listed on the LANGUAGE menu. The displayed menus on the screen are described in the selected language.

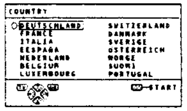
2. Press ▼/▲ button to select ENGLISH.


LANGUAGE
ENGLISH
FRANÇAIS
DEUTSCH
ITALIANO
CASTELLANO
NEDERLANDS
DANSK
NORSK
SVENSKA
SUOMI

Note:
- In this manual, operation procedures are explained in English as the on-screen language is set to ENGLISH. If you select "FRANÇAIS" from the LANGUAGE selection menu, menus are all described in French of course.

3. Press OK button.

English is set for the on-screen display description, and the COUNTRY menu appears.

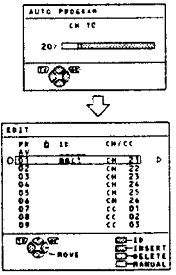

COUNTRY
DEUTSCHLAND
FRANCE
ITALIA
ESPAÑA
NEDERLAND
BELGIUM
LUXEMBOURG
SWITZERLAND
DANMARK
SVERIGE
ÖSTERREICH
NORGE
SUOMI
PORTUGAL
START

Automatically allocating stations to PR channels

To view a TV programme, you must first allocate broadcast stations to PR channels. You can automatically allocate up to 99 stations to PR channels PR1 to PR 99 on this TV. Broadcast stations that can be received are automatically determined and set to PR channels.

4. Press ▼/▲ and ◄/► button to select your country, then press blue button.

Broadcast stations are automatically allocated to the PR channels.


AUTO PROGRAM
CH 70
20 /
EDIT
PR
ID
CH/CC
AV
01
BBC1
CH 21
02
CH 22
03
CH 23
04
CH 24
05
CH 25
06
CH 26
07
CC 01
08
CC 02
09
CC 03
MOVE
ID
INSERT
DELETE
MANUAL

The EDIT menu is displayed after completed the allocation.

- If you want to edit PR channels or allocate a station to PR0 (AV) channel, see page 24 "EDIT/MANUAL" for procedural description.

Note:
- If you want to quit automatic allocation in the middle, press the TV button.

● The procedure is complete.
Press the TV button to exit the menu.

6. Viewing a television programme

1. Select a PR channel.

Selection

- Press the PR channel V/Λ button.

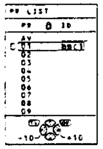
Direct channel selection

- Press the corresponding number buttons.
  Example: To select channel 6, press "6".
  To select channel 12, press "1" and "2".

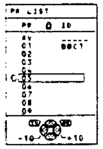
Notes:
- If the picture is not clear or no colour appears, change the colour system manually (see page 11 for details).
- Enter "0" when selecting an AV channel (PR 0 channel).
- If your TV is AV-32WP2EN or AV-32WP2EP, the MULTI-PICTURE function can be used to select a PR channel. For details, refer to "MULTI-PICTURE" on page 15.

To use the PR LIST to select a PR channel

1. Press Information button repeatedly to select PR LIST.
   The PR LIST appears.
   - To exit the PR LIST, press TV button.


PR LIST
PR ID
AV
01 BBC1
02
03
04
05
06
07
08
09
-10
+10

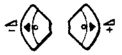
2. Press ▼/▲ button to select a PR channel.
   - Press ► button to view the next page of the PR LIST.
   - Press ◄ button to view the previous page of the PR LIST.


PR LIST
PR ID
AV
01 BBC1
02
03
04
05
06
07
08
09
-10
+10

Note:
- The 🔒 mark will appear on the PR channel when the CHILD LOCK setting is on (see page 17).

3. Press OK button.

2. Press the Volume –/+ button.



The Volume level indicator appears and the volume changes as you press the Volume –/+ buttons.

Turning the TV and power off

1. Press the Standby button to turn the TV off.

The Power lamp changes from green to red.
The TV enters standby mode.

2. Press the Main power button on the TV to turn the main power off.

The Power lamp goes off.

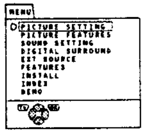
Note:
- To save energy, we recommend that you turn the main power off if you do not plan to use your TV for a long time.

To listen to the sound using headphones

Condition:
Connect headphones to the TV.

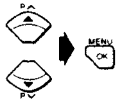
1. Press OK button.

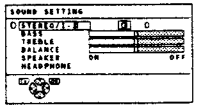
The MENU appears.


MENU
PICTURE SETTING
PICTURE FEATURES
SOUND SETTING
DIGITAL SURROUND
EXT SOURCE
FEATURES
INSTALL
INDEX
DEMO

2. Press ▼/▲ button to select SOUND SETTING, then press OK button.

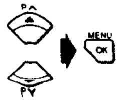
The SOUND SETTING menu appears.

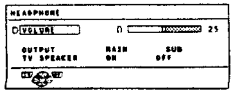



SOUND SETTING
STEREO/I-II
0
BASS
TREBLE
BALANCE
SPEAKER
HEADPHONE
ON
OFF

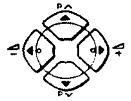
3. Press ▼/▲ button to select HEADPHONE, then press OK button.

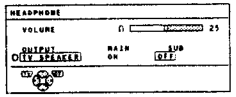
The HEADPHONE menu appears.




HEADPHONE
VOLUME
25
OUTPUT
TV SPEAKER
MAIN
ON
SUB
OFF

4. Press ▼/▲ button to select TV SPEAKER, then press ◄/► button to select ON or OFF.



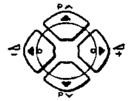

HEADPHONE
VOLUME
25
OUTPUT
TV SPEAKER
MAIN
ON
SUB
OFF

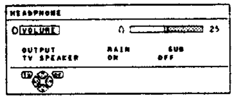
ON: The sound from the TV speakers is not turned off even when the headphones are connected.

OFF: The sound from the TV speakers is turned off when the headphones are connected.

Note:
- The sound output from the AUDIO OUT terminals can not be turned off.

5. Press ▼/▲ button to select VOLUME, then press ◄/► button to adjust the volume of the headphones.




HEADPHONE
VOLUME
25
OUTPUT
TV SPEAKER
MAIN
ON
SUB
OFF

6. Press OK button.

This completes the setting.

To select a channel without using the remote control

You can also use the buttons on the front panel of the TV.

1. Press the Up/down button to turn your TV on.

The Power lamp changes from red to green.

Note:
- If your TV does not turn on, press the Main power button, and then press the Up/down button again.

2. Press the Up/down button to select the PR channel.

Note:
- PR channel selection is not available while the volume level indicator is displayed.

3. Adjust the volume.

1. Press the Volume button.
   The volume level indicator appears.
2. Press the Up/down button while the volume level indicator is displayed.

● To turn off your TV, press the Main power button.

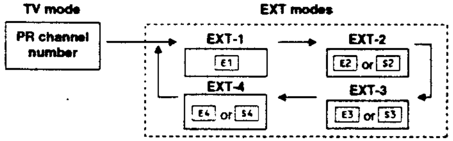
The Power lamp goes off.

Viewing images from external devices

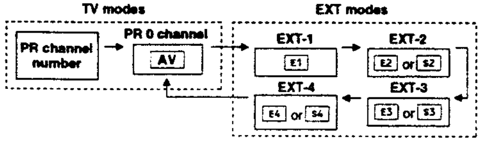
1. Repeatedly press the 0 button to select the EXT terminal.

The current selection appears, and disappears after several seconds.

When a station is not registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:


TV mode
EXT modes
PR channel number
EXT-1
E1
EXT-2
E2 or S2
EXT-3
E3 or S3
EXT-4
E4 or S4

When a station is registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:


TV modes
EXT modes
PR channel number
PR 0 channel
AV
EXT-1
E1
EXT-2
E2 or S2
EXT-3
E3 or S3
EXT-4
E4 or S4

TV mode:
Shows images input from an external device (such as a VCR) or TV aerial connected to the aerial socket of your TV.

EXT modes:
Shows images input from an external device (such as a VCR) connected to the selected EXT terminal.

- To use S-Video mode to view input from an S-VHS VCR, see "To select S-VIDEO input for a terminal" on page 22. When selecting EXT-2,EXT-3 or EXT-4 input terminals as S-VIDEO input, E2,E3 or E4 changes to S2,S3 or S4in the display.

Notes:
- If the picture is not clear or no colour appears, change the colour system manually (see page 11).
- When selecting an EXT terminal with no input signal, the EXT number and ID become fixed on screen.

SOUND AND PICTURE

MUTE

You can mute the volume to 0 instantly. This is convenient when answering the phone or when receiving visitors.

1. Press ⊙ (Mute).

The sound is muted.

To restore the sound:
Press the Mute button again.

POWER BASS

You can enjoy richness and fullness of the bass sound.

1. Press P. BASS.

The POWER BASS turns on.

P.BASS
POWER BASS ON

To cancel the function:
Press the P. BASS button again.

POWER BASS OFF

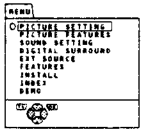
MULTI SOUND

You can select the multi sound mode for stereo broadcast programmes and bilingual programmes.

Note:
- The MULTI SOUND function has no effect on programmes other than A2 or NICAM broadcast programmes.

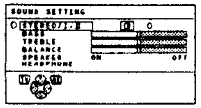
1. Press OK.

The MENU appears.


MENU
PICTURE SETTING
PICTURE FEATURES
SOUND SETTING
DIGITAL SURROUND
EXT SOURCE
FEATURES
INSTALL
INDEX
DEMO

2. Press ▼/▲ to select SOUND SETTING, then press OK.

The SOUND SETTING menu appears.


SOUND SETTING
STEREO/I•II
0
BASS
TREBLE
BALANCE
SPEAKER
HEADPHONE
ON
OFF

3. Press ▼/▲ to select STEREO / I • II.

Notes:
- The multi sound mode display is different from the broadcast programme.
- The multi sound function does not work in EXT modes.
  The STEREO / I•II does not appear in SOUND SETTING menu

4. Press ◀/▶ to select a multi sound mode.

OO : Stereo sound
I : Bilingual I (Sub I)
II : Bilingual II (Sub II)
O : Normal sound

5. Press OK.

This completes the setting.

Note:
- When you display the current PR channel number, the current multi sound mode appears for approximately 3 seconds.

TINT

You can choose from among three TINT modes.

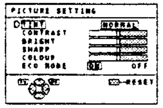
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.

3. Press ▼/▲ to select TINT.


PICTURE SETTING
TINT
NORMAL
CONTRAST
BRIGHT
SHARP
COLOUR
ECO MODE
ON
OFF
RESET

4. Press ◀/▶ to select a tint mode.

COOL:
A cool white colour base with a boost in the colour and contrast levels. Creating a more vivid picture.

WARM:
Use this mode when viewing film programmes.

NORMAL:
A normal white colour base with no boost in the colour or contrast levels.

5. Press OK.

This completes the setting.

COLOUR SYSTEM

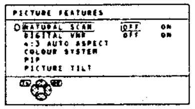
The colour system is automatically selected, but if the picture is not clear or no colour appears, select the colour system manually.

1. Press OK.

The MENU appears.

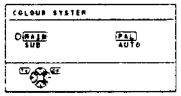
2. Press ▼/▲ to select PICTURE FEATURES, then press OK.

The PICTURE FEATURES menu appears.


PICTURE FEATURES
NATURAL SCAN
OFF
ON
DIGITAL VNR
OFF
ON
4:3 AUTO ASPECT
COLOUR SYSTEM
PIP
PICTURE TILT

3. Press ▼/▲ button to select COLOUR SYSTEM, then press OK.

The COLOUR SYSTEM menu appears.


COLOUR SYSTEM
MAIN
SUB
PAL
AUTO

4. Press ▼/▲ button to select MAIN or SUB.

- If your TV is not AV-32WP2EN or AV-32WP2EP, the SUB will not appear. So you can skip this operation.

MAIN:
You can select the colour system of MAIN picture.

SUB:
You can select the colour system of SUB picture.

5. Press ◀/▶ to select the appropriate colour system.

PAL:
PAL system.

SECAM:
SECAM system.

NTSC3.58:
NTSC 3.58 MHz system.

NTSC4.43:
NTSC 4.43 MHz system.

AUTO:
Automatic colour system selection.

Notes:
- Auto may not function properly depending on signal quality. If the picture is abnormal in AUTO mode, select another colour system manually.
- When in TV mode (PR 1 to PR 99), you cannot select AUTO, NTSC 3.58 or NTSC 4 43.
- When in TV mode (PR 0), you cannot select NTSC 3.58 or NTSC 4.43.

6. Press OK.

This completes the setting.

PICTURE/SOUND ADJUSTMENT

You can adjust the picture and sound as you like.

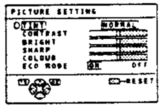
To adjust the picture

1. Press OK.

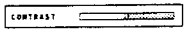
The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.



3. Press ▼/▲ to select an item, and press ◀/▶ to adjust it.



- To return to the default settings, press blue button.

◀	Item	▶
Lower	CONT. (picture contrast)	Higher
Darker	BRIGHT (picture brightness)	Brighter
Softer	SHARP (picture sharpness)	Sharper
Lighter	COLOUR (picture colour)	Deeper
Reddish	HUE (picture hue)	Greenish

Note:
- You can adjust the HUE (picture hue) only when the colour system is NTSC 3.58 or NTSC 4.43.

4. Press OK.

This completes the setting.

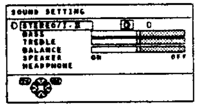
To adjust the sound

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select SOUND SETTING, then press OK.

The SOUND SETTING menu appears.



Note:
- When DOLBY* PRO LOGIC or PRO LOGIC 3D-PHONIC is selected in DIGITAL SURROUND menu, BALANCE and SPEAKER do not appear.

* Manufactured under license from Dolby laboratories Licensing Corporation.
"Dolby", the double-D symbole and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.

3. Press ▼/▲ to select an item, and press ◀/▶ to adjust it.

◀	Item	▶
Weaker	BASS (low frequency sound)	Stronger
Weaker	TREBLE (high frequency sound)	Stronger
Left	BALANCE (audio balance)	Right

SPEAKER ON/OFF:
Use this function if you connect an audio amplifier and front speakers to your TV. If you set this function to OFF, sound is no longer output from the TV's speakers. For details, see "To use 2 external speakers" on page 27.

4. Press OK.

This completes the setting.

ECO MODE

When you set ECO mode to ON, the screen contrast is automatically adjusted to a setting suitable for the brightness of your room.
This reduces eye strain and the power consumption of the TV.

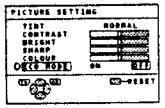
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.

3. Press ▼/▲ to select ECO.



4. Press ◀/▶ to select ON, OFF.

5. Press OK.

This completes the setting.
- If you turned on ECO mode, the ECO lamp lights.

NATURAL SCAN

When you set NATURAL SCAN to ON, you can remove the horizontal line vibration on the screen so improving picture stability further.

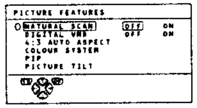
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE FEATURES, then press OK.

The PICTURE FEATURES menu appears.

3. Press ▼/▲ to select NATURAL SCAN.



4. Press ◀/▶ to select ON, OFF.

5. Press OK.

This completes the setting.

DIGITAL VNR

When you set DIGITAL VNR to ON, you can reduce the noise on the screen so improving picture quality further.

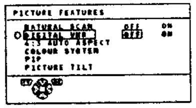
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE FEATURES, then press OK.

The PICTURE FEATURES menu appears.

3. Press ▼/▲ to select DIGITAL VNR.



4. Press ◀/▶ to select ON, OFF.

5. Press OK.

This completes the setting.

ZOOM

Select a ZOOM mode to change the picture format. You can enlarge the picture to fill the wide TV screen (16:9 aspect ratio). In addition, you can stretch a normal picture (4:3 aspect ratio) to fill the wide TV screen.

Notes:
- The picture format information of the present broadcasting programme may be received as WSS (Wide Screen Signalling). When AUTO mode is selected for ZOOM mode and the WSS signal is received, this TV automatically selects the optimum ZOOM mode corresponding to the WSS signal. However, in the case of weak WSS signal reception, this function may not work correctly. In this case, select an optimum ZOOM mode manually.
- If the EXT-1, EXT-2 or EXT-3 terminal's input is from a picture signal with a 16:9 aspect ratio picture format, the ZOOM mode may automatically changes to FULL mode. This is because the TV detects an identification signal which is not an WSS signal.

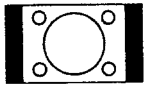
Manual ZOOM selection

you can select a disired ZOOM mode manually.

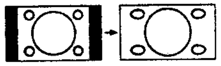
1. Press ZOOM repeatedly to select a ZOOM mode.

The picture expands.

REGULAR mode:
Use to view a normal picture (4:3 aspect ratio) unchanged.



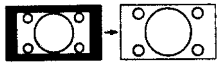
PANORAMIC mode:
Stretches the left and right sides of a normal picture to fill the screen, in a way that does not appear unnatural.



(PANORAMIC)

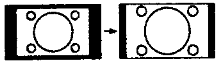
Note:
- In PANORAMIC mode, the top and bottom of the picture are slightly cut off.

16:9 ZOOM mode:
Use to expand a wide picture (16:9 aspect ratio).



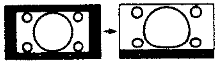
(16:9 ZOOM)

14:9 ZOOM mode:
Use to expand a picture with a 14:9 aspect ratio.



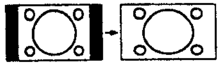
(14:9 ZOOM)

16:9 ZOOM SUBTITLE mode:
Use to expand a picture with a 16:9 aspect ratio having subtitles at the bottom of the screen.



(16:9 ZOOM SUBTITLE)

FULL mode:
Uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



(FULL)

Note:
- For pictures with a 16:9 aspect ratio that have been squeezed into a normal picture (4:3 aspect ratio), select FULL mode to restore their original dimensions

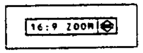
To move the picture vertically:

If you cannot see subtitles at the bottom of the screen, or if the top or bottom is cut off, move the picture vertically.

Note:
- You cannot move the picture vertically in AUTO, REGULAR and FULL mode.

1. Press ZOOM.

The current ZOOM mode is displayed.



2. Before the display disappears, press ▼/▲ to move the picture up or down.

Note:
- If you change the ZOOM mode, the picture returns to its default position.

Automatic ZOOM selection (AUTO mode)

You can set your TV to automatically select the optimum ZOOM mode to suit the picture format.

1. Press ZOOM repeatedly to select AUTO.

Your TV automatically selects the optimum ZOOM mode to suit the current programme's picture format.

Note:
- This function may not work correctly depending on the programme. In this case, select the optimum ZOOM mode manually.

(Continued to the next page)

To preset a ZOOM mode for the normal picture:

You can preset one of three ZOOM modes, REGULAR, PANORAMIC or 14:9 ZOOM, as the ZOOM mode for the normal picture (4:3 aspect ratio).

1. **Press OK.**

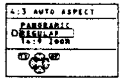
   The MENU appears.

2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**

   The PICTURE FEATURES menu appears.

3. **Press ▼/▲ to select 4:3 AUTO ASPECT, then press OK.**

   The 4:3 AUTO ASPECT menu appears.



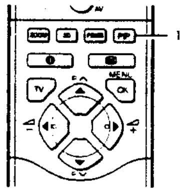
4. **Press ▼/▲ to select a ZOOM mode.**

5. **Press OK.**

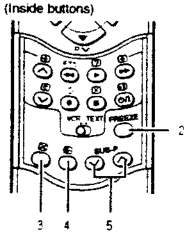
   This completes the setting.

PIP *(AV-32WP2EN, AV-32WP2EP only)*

(Outside buttons)



(Inside buttons)



1 PIP button
2 FREEZE button
3 Multi button
4 Swap button
5 SUB-P V/Λ button

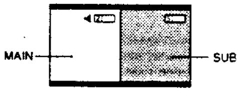
BASIC OPERATION

You can select two types of PIP picture mode.

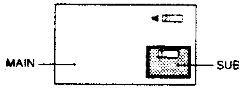
1. **Press PIP repeatedly to select a PIP mode.**

   Two pictures are displayed in the same time.

Twin pictuers mode:
MAIN-picture is displayed on the left hand and SUB-picture is displayed on the right hand.



Picture in picture mode:
SUB-picture is displayed in Main picture.



2. **Press SUB-P V/Λ to select the SUB-picture's PR channel or EXT mode.**

To clear the SUB-picture:
Press the PIP button again.

Notes:
- The PR channel or EXT mode image which is the same as the MAIN-picture can not be selected.
- The movement of the Sub-picture image is not as smooth as that of the MAIN-picture image.
- If the MAIN-picture image signal condition is bad, the SUB-picture image may be disordered. If the MAIN-picture image signal condition is improved, the SUB-picture image also improves.
- If the picture standard of the MAIN-picture and SUB-picture are different, the top and bottom of one of them may be missing.
- If an external device is operated, the SUB-picture may disappear. If this happens, press the PIP button once more and redisplay the SUB-picture.
- If the SWAP button is pressed when the image from the external decoder is displayed in the MAIN-picture. the same image is displayed in both the MAIN picture and SUB-picture. If the SWAP button is pressed once more, the previous state is returned to.
- In the Twin pictures mode, a horizontal line is displayed at the top of the screen. This is normal and is not a mulfunction.

To change the position of SUB-picture in Picture in picture mode:

You can select the one of four positions of the SUB-picture in PIcture in picture mode.

1. **Press OK.**

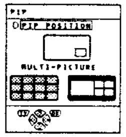
   The MENU appears.

2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**

   The PICTURE FEATURES menu appears.

3. **Press ▼/▲ to select PIP, then press OK.**

   The PIP menu appears.



4. **Press ▼/▲ to select PIP POSITION, then press ◀/▶ to select the position.**

5. **Press OK.**

   The menu disappears.

To listen to the sound of the SUB-picture

While llistening to the sound of the main picture on the speakers, you can listen to the sound of SUB-picture on your headphones.

1. **Press OK.**

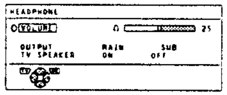
   The MENU appears.

2. **Press ▼/▲ to select SOUND SETTING, then press OK.**

   The SOUND SETTING menu appears.

3. **Press ▼/▲ to select HEAD-PHONE, then press OK.**

   The HEADPHONE menu appears.



4. **Press ▼/▲ to select TV SPEAKER, then press ◀/▶ to select ON or OFF.**

   ON:
   Main pisture sound from speakers while listening to the sound on your headphones.

   OFF:
   No sound from speakers

5. **Press ▼/▲ to select OUTPUT, then press ◀/▶ to select SUB.**

   MAIN:
   You can listen to the sound of MAIN picture on your headphones.

6. **Press ▼/▲ to select VOLUME, then press ◀/▶ to adjust the volume of the headphones.**

7. **Press OK.**

   The menu disappears.

Notes:
- When the SUB-picture is in TV mode, the SUB-picture sound is monaural only.
- The Multi sound function does not work for the SUB-picture sound.
- Neither any of the surround sound functions or the POWER BASS function work for the SUB picture sound.

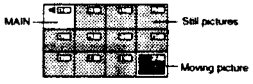
MULTI-PICTURE

The PR channel and EXT mode images can be displayed as still pictures on the outside of the MAIN-picture, and the image which you want to see can be selected from these still pictures and seen as the MAIN-picture.

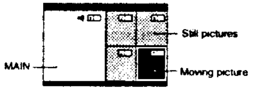
1. **Press the Multi button.**

   The PR channel and EXT mode images are displayed in the channel number order. Only the image which is displayed last is left as a moving picture. The other images change to still pictures.

Note:
- The MAIN-picture PR channel number or EXT mode number is skipped.



12-pictures multi



5-pictures multi

In order to display the next PR channel or EXT mode image:
Press the Multi button again.

To clear the Multi-pictures:
Press the TV button.

2. **Press the ▼/▲ button or SUB P V/Λ button and select the PR channel or EXT terminal image that you want to see.**

   The selected image changes from a still picture to a moving picture.

3. **Press OK.**

   The Multi-pictures disappear and the MAIN-picture image changes to the selected PR channel or EXT terminal image.

To select the multi-picture style

You can select one of two multi-picture's styles.

1. **Press OK.**

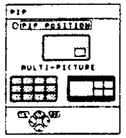
   The MENU appears.

2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**

   The PICTURE FEATURES menu appears.

3. **Press ▼/▲ to select PIP, then press OK.**

   The PIP menu appears.



4. **Press ▼/▲ to select MULTI-PICTURE, then press ◀/▶ to select a multi-picture's style.**

5. **Press OK.**

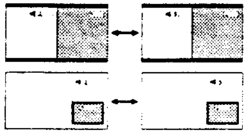
   The menu disappears.

SWAP

You can swap MAIN and SUB-pictures

1. **Press the Swap button.**

   Each time you press the Swap button, the MAIN picture and SUB-picture swap.



Notes:
- If the SWAP button is pressed when the image from the external decoder is displayed in the MAIN picture, the same image is displayed in both the MAIN picture and SUB picture. If the SWAP button is pressed once more, the previous state is returned to.
- When another PR channel is being watched in the SUB picture, if the SWAP function is used the TV broadcast PR channel, which is output from the EXT-1, EXT-2 or EXT-3 terminal, is switched.

FREEZE

You can view the MAIN-picture's frozen image as the SUB-picture.

1. **Press FREEZE.**

   The main picture's frozen image (still picture) is displayed as the SUB-picture.

MAIN
Still picture

To cancel the FREEZE function:
Press the FREEZE button again.

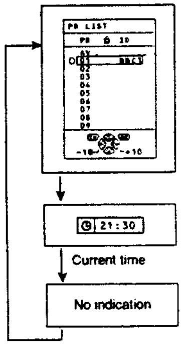
OTHER FEATURES

INFORMATION

You can display the PR LIST or the current time.

1. **Press ⓘ (Information) repeatedly.**

   The display changes cyclically in the following order.


PR LIST
21:30
Current time
No indication

About PR LIST:

- Ten positions including the currently selected PR channel will be displayed as a list.
  Press ▼/▲ / ◀/▶ to select the desired PR channel. For details see page 7.

About the current time display:
This TV uses teletext data to determine the current time.

- If the TV has not received a station that has teletext data since it was turned on, the time display is blank. To view the current time, select a station that is broadcasting teletext data. As long as you do not turn off the TV, then even if you select other stations, the time will still be displayed.
- When watching videos, the wrong current time is sometimes displayed.

SLEEP TIMER

You can set the TV to automatically turn off after a specified period of time.

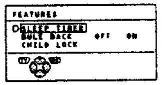
> ***Note:***
> - The SLEEP TIMER does not turn off the Main power.

1. **Press OK.**

   The MENU appears.

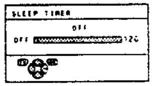
2. **Press ▼/▲ to select FEATURES, then press OK.**

   The FEATURES menu appears.


FEATURES
SLEEP TIMER
BLUE BACK OFF ON
CHILD LOCK

3. **Press ▼/▲ to select SLEEP TIMER, then press OK.**

   The SLEEP TIMER menu appears.


SLEEP TIMER
OFF
OFF 120

4. **Press ◀/▶ to select a period of time.**

   You can set the period of time a maximum of 120 minutes in 10 minute increments.

   OFF:
   Turns off the SLEEP TIMER.

5. **Press OK.**

   - The Sleep timer lamp lights if you set the SLEEP TIMER.

To display the remaining Sleep timer time:
Perform steps 1 to 3 to display the SLEEP TIMER menu, and press OK button when you finish checking the time.

To turn off the Sleep timer:
Perform steps 1 to 3 to display the SLEEP TIMER menu, press ◀ button to select "OFF", and then press OK button.

- The Sleep timer lamp goes out.

> ***Note:***
> - One minute before the SLEEP TIMER turns off the TV, "GOOD NIGHT!" appears.

BLUE BACK

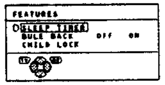
When viewing a PR channel with no or poor reception, or if there is no input from an external device, you can mute the sound and change the picture into a blue picture.

1. **Press OK.**

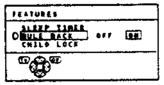
   The MENU appears.

2. **Press ▼/▲ to select FEATURES, then press OK.**

   The FEATURES menu appears.


FEATURES
SLEEP TIMER
BLUE BACK OFF ON
CHILD LOCK

3. **Press ▼/▲ to select BLUE BACK.**


FEATURES
SLEEP TIMER
BLUE BACK OFF ON
CHILD LOCK

4. **Press ◀/▶ to select ON or OFF.**

5. **Press OK.**

   This completes the setting.

CHILD LOCK

You can lock some PR channels to prevent your children from watching them.

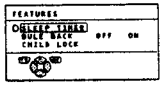
To set the CHILD LOCK

1. **Press OK.**

   The MENU appears.

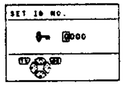
2. **Press ▼/▲ to select FEATURES, then press OK.**

   The FEATURES menu appears.


FEATURES
SLEEP TIMER
BLUE BACK OFF ON
CHILD LOCK

3. **Press ▼/▲ to select CHILD LOCK, then press 0 button.**

   The SET ID NO menu appears.

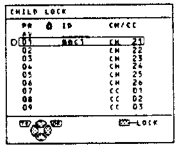

SET ID NO.
0000

4. **Enter the ID number.**

   1. Press ▼/▲ to select a number.
   2. Press ◀/▶ to move the cursor.

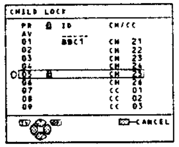
5. **Press OK.**

   The CHILD LOCK menu appears.


CHILD LOCK
PR ID CH/CC
LOCK

6. **Press ▼/▲ to select a PR channel, then press blue button.**

   The selected PR channel is locked.


CHILD LOCK
PR ID CH/CC
CANCEL

- To cancel the CHILD LOCK: Press blue button again.
- Repeat step 6 to lock all PR channels which you want to lock.

7. **Press OK.**

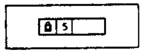
   This completes the setting.

> ***Notes:***
> - You cannot select a locked PR channel using the PR channel V/Λ buttons.
> - Even if you can select a locked channel and display it, you can not view the programme of the locked channel.

To view a locked PR channel

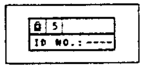
1. **Select a locked PR channel.**

   - Use the number buttons to select the PR channel.
     The locked channel is displayed.



2. **Press ⓘ (Information).**

   The ID NO. input menu appears.



3. **Press the number buttons to enter the ID number.**

   You are now viewing the locked PR channel.

If you forget the ID number:
Perform steps 1 to 3 of "To set the CHILD LOCK". After you confirm the ID number, press the TV button to exit the menu.

DEMONSTRATION

The demonstration runs automatically and introduces the menus of this TV's main features.

1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select DEMO, then press OK.**

   The demonstration begins.
   - To stop the demonstration, press any button on the remote control.

INDEX

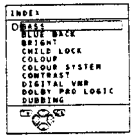
You can go to the desired function's menu directly from this INDEX menu.

1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select INDEX, then press OK.**

   The INDEX menu appears.


INDEX
BASIC
BLUE BACK
BRIGHT
CHILD LOCK
COLOUR
COLOUR SYSTEM
CONTRAST
DIGITAL VNR
DOLBY PRO LOGIC
DUBBING

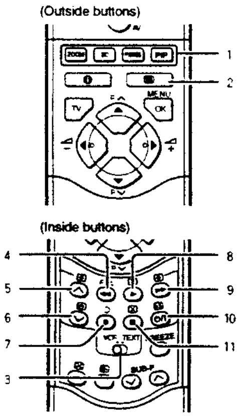
3. **Press ▼/▲ to select the function you want to use, then press OK.**

   Your selected function's menu or the menu which includes your selected function appears.

   - To return to the MENU, press the Information button.

TELETEXT

Note:
- If you have trouble receiving teletext broadcasts, consult your local dealer or the teletext station.



1 Colour buttons
2 TV/text button
3 VCR/TEXT selector switch
- When this switch is set to the TEXT side, the following buttons function as the teletext control button.

4 MODE button
5 HOLD button
6 SUB PAGE button
7 STORE button
8 REVEAL button
9 SIZE button
10 INDEX button
11 DISPLAY CANCEL button

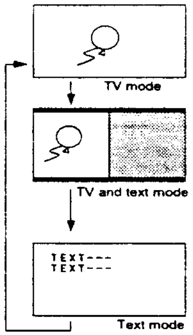
BASIC TELETEXT OPERATION

You can view three types of teletext broadcasts on the TV: Fastext, TOP and WST. The TV automatically recognizes the type of teletext broadcast.

Condition:
- The VCR/TEXT selector switch must already be set to the TEXT side.

1. Select a channel with a teletext broadcast.

2. Press ⌨ (TV/text).



Note:
- If your TV is not AV-32WP2EN or AV-32WP2EP, the TV and Text mode can not be selected.
- The movement of the TV image in the TV and text mode is not as smooth as that in the TV mode

3. Select a page number.

Browse:
Press the PR channel ∨/∧ button on the remote control.

Direct selection:
Press the number buttons to enter a three-digit page number.

Colour button selection:
Press a colour button to select the corresponding page number on the bottom line of the screen.

Notes:
- Category names of teletext pages may appear instead of page numbers.
- In principle, ZOOM mode is fixed to FULL mode when you view Teletext programmes.
- Some Teletext programmes display a mixture of regular TV programmes and Teletext information. When viewing these programmes, ZOOM mode returns to the mode you selected before you started viewing Teletext programmes. With the ZOOM mode, the Teletext information may not be displayed in the correct position. If this happens, press the TV/Text button to cancel the Text mode, then press the ZOOM button to change the ZOOM mode to the PANORAMIC mode or FULL mode.

● To return to TV mode, press the TV/text button repeatedly.

Notes:
- You can also return to TV mode by pressing the TV button.
- None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.
- In the TV and text mode, a horizontal line is displayed at the top of the screen. This is normal and is not a malfunction.

DISPLAY CANCEL

You can search for a teletext page while watching TV.

1. Select a teletext page.

The TV searches for a teletext page.

2. Press DISPLAY CANCEL.

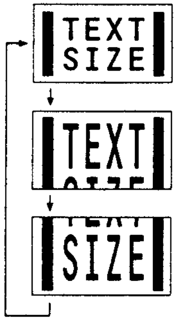
The TV programme appears.
When the TV finds the teletext page, its page number appears in the upper left of the screen.

3. Press ⌨ (TV/text) when the page number is on the screen.

SIZE

You can double the height of the teletext display.

1. Press SIZE repeatedly.

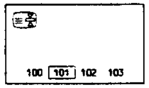


HOLD

You can hold a teletext page on the screen for a desired length of time, even while several other teletext pages are being received.

1. Press HOLD.

⊞ is displayed in the upper left of the screen, and the teletext page is held on the screen.



To release hold mode:
Press HOLD button again.

INDEX

Just press INDEX button to return to the index page.

1. Press INDEX.

Fastext/TOP/WST:
Returns to page 100 or a previously specified page.

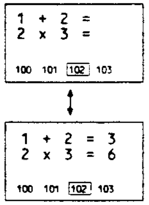
LIST mode:
Returns to the page number displayed in the lower left area of the screen.

REVEAL

Some teletext pages include hidden text (such as answers to a quiz).

1. Press REVEAL.

Each time you press REVEAL button, text is hidden or revealed.



LIST MODE

If you store the numbers of teletext pages you view often, you can quickly call up a desired teletext page whenever you like.

Note:
- You can store up to 64 pages in memory. You can store four pages in each channel from 1 to 15 (60 pages), and four pages that are the same for all channels above channel 15 (4 pages).

To store the page numbers

1. Press MODE to engage LIST mode.

Stored page numbers are displayed at the bottom of the screen.

2. Press a colour button, then enter the number of the teletext page.

To assign other pages to remaining colour buttons, repeat this operation.

3. Press and hold STORE.

The four page numbers blink white to indicate that they are stored in memory.

To call up a stored page

1. Press MODE to engage LIST mode.

Stored page numbers are displayed at the bottom of the screen.

To release LIST mode:
Press MODE button again.

2. Press a colour button to which a page has been assigned.

SUB PAGE

Some teletext pages include sub-pages that are automatically displayed. You can hold any sub-page, or view it at any time.

1. Call up a teletext page with sub-pages.

2. Press SUB PAGE.

Sub-page numbers are displayed at the left of the screen.

Background colour of the sub-page number is yellow:
This is the number of the sub-page which is currently being displayed.

Background colour of the sub-page number is white:
These are the numbers of the sub-pages which can be displayed.

Background colour of the sub-page number is blue or red:
These are the numbers of sub-pages which have not been sent and can therefore not be displayed.

3. Press ▼/▲ button to select a sub-page number.

SURROUND SOUND

DOLBY PRO LOGIC 3D-PHONIC

You can enjoy the ambiance of Dolby Surround encoded programmes.

Condition:
- Before performing the procedure. disconnect headphones from the TV.

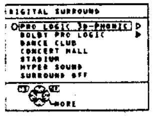
Note:
- This function works only with Dolby Surround encoded programmes.
- When operating this function, the TV's 3D lamp lights up.
- This function does not work correctly when listening to the sound with headphones.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select DIGITAL SURROUND, then press OK.

The DIGITAL SURROUND menu appears, showing the currently active function.

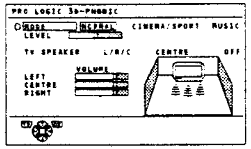

DIGITAL SURROUND
PRO LOGIC 3D-PHONIC
DOLBY PRO LOGIC
DANCE CLUB
CONCERT HALL
STADIUM
HYPER SOUND
SURROUND OFF
MORE

3. Press ▼/▲ to select PRO LOGIC 3D-PHONIC.

To cancel the function:
Select SURROUND OFF, then press the OK button.

4. Press ▶.

The PRO LOGIC 3D-PHONIC menu appears.


PRO LOGIC 3D-PHONIC
MODE
NORMAL
CINEMA/SPORT
MUSIC
LEVEL
TV SPEAKER
L/R/C
CENTRE
OFF
VOLUME
LEFT
CENTRE
RIGHT

5. Press ▼/▲ to select MODE.

6. Press ◀/▶ to select the desired mode.

NORMAL:
For normal programmes

CINEMA/SPORT:
For cinema and sports programmes

MUSIC:
For music programmes

To adjust the effect level:
Press the ▼/▲ button to select LEVEL, then press the ◀/▶ button to adjust the effect level.

To adjust the volume level of each speaker:
Press ▼/▲ button to select LEFT, CENTRE or RIGHT, then press the ◀/▶ button to adjust the volume level.

Note:
- Since models other than AV-32WP2EN and AV-32WP2EP do not have a centre speaker built-in to the TV. CENTRE can not be selected. However, when 2 external speakers are being used, the TV speakers can be used as the centre speaker, so CENTRE can be selected.

TV SPEAKER:
This setting is only changed when 2 external speakers are being used. For details, refer to "To use 2 external speakers" on page 27.

Note:
- When not using external speakers, leave the TV SPEAKER setting as L/R/C (L/R in the case of models other than AV-32WP2EN and AV-32WP2EP) Otherwise sound may not come out of the TV speakers or the sound may become monaural.

7. Press OK.

Note:
- If, while using this function, you connect headphones to your TV, the 3D HEADPHONE function (see next page) activates automatically. However, if SPEAKER is set to ON in the HEADPHONE menu, the 3D HEADPHONE function is not activated.

To turn on/off DOLBY PRO LOGIC 3D-PHONIC with one touch

1. Press 3D.

DOLBY PRO LOGIC 3D-PHONIC turns on.

3D
PRO LOGIC 3D-PHONIC

Note:
- If 3D HEADPHONE appears, disconnect the headphones from the TV.

To cancel the function:
Press the 3D button again.

SURROUND OFF

To return the previous surround function:
Press the 3D button twice.

DIGITAL SURROUND

You can enjoy any one of the four Digital Surround function.

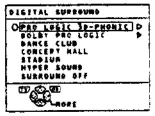
Condition:
- Before performing the procedure, disconnect headphones from the TV.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select DIGITAL SURROUND, then press OK.

The DIGITAL SURROUND menu appears, showing the currently active function.


DIGITAL SURROUND
PRO LOGIC 3D-PHONIC
DOLBY PRO LOGIC
DANCE CLUB
CONCERT HALL
STADIUM
HYPER SOUND
SURROUND OFF
MORE

3. Press ▼/▲ to select the desired function.

DANCE CLUB:
For the atmosphere of a dance club

CONCERT HALL:
For the atmosphere of a concert hall

STADIUM:
For the atmosphere of a stadium

HYPER SOUND:
To give monaural sound the spacious feeling of stereo sound

To cancel the function:
Select SURROUND OFF.

4. Press OK.

Notes:
- Only HYPER SOUND works well with monaural sound programmes.
- HYPER SOUND does not work well with stereo sound programmes.
- If, while using this function, you connect headphones to your TV, Headphone Surround (see next page) activates automatically. However, if SPEAKER is set to ON in the HEADPHONE menu, the HEADPHONE SURROUND function is not activated.

HEADPHONE SURROUND

You can enjoy surround sound on your headphones. You can enjoy any one of the four Headphone surround functions.

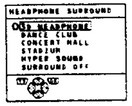
Condition:
- Before performing this procedure, connect headphones to the TV.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select HEADPHONE SURROUND, then press OK.

The HEADPHONE SURROUND menu appears, showing the currently active function.


HEADPHONE SURROUND
3D HEADPHONE
DANCE CLUB
CONCERT HALL
STADIUM
HYPER SOUND
SURROUND OFF

If HEADPHONE SURROUND does not appear in the MENU, set SPEAKER in the HEADPHONE menu to OFF. For details, refer to "To listen to the sound using headphones" on page 8.

3. Press ▼/▲ to select the desired function.

3D HEADPHONE:
For a broad, atmospheric sound

DANCE CLUB:
For the atmosphere of a dance club

CONCERT HALL:
For the atmosphere of a concert hall

STADIUM:
For the atmosphere of a stadium

HYPER SOUND:
To give monaural sound the spacious feeling of stereo sound

To cancel the function:
Select SURROUND OFF.

4. Press OK.

Note:
- HYPER SOUND does not work well with stereo sound programmes.

To turn the 3D HEADPHONE on/off with one touch

1. Press 3D.

3D HEADPHONE turns on.

3D
3D HEADPHONE

Note:
- If PRO LOGIC 3D-PHONIC is still displayed, set SPEAKER in the HEADPHONE menu to OFF.

To cancel the function:
Press the 3D button again.

SURROUND OFF

To return the previous surround function:
Press the 3D button twice.

DOLBY PRO LOGIC SURROUND

You can also use Dolby Pro Logic Surround sound with 4 or 5 speakers. If you wish to use this system, additional amplifiers and speakers are required. For details, see "To use 4 or 5 speakers" on page 28.

Condition:
- Before performing the procedure, disconnect headphones from the TV.

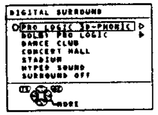
Note:
- This function works only with Dolby Surround encoded programmes.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select DIGITAL SURROUND, then press OK.

The DIGITAL SURROUND menu appears, showing the currently active function.


DIGITAL SURROUND
PRO LOGIC 3D-PHONIC
DOLBY PRO LOGIC
DANCE CLUB
CONCERT HALL
STADIUM
HYPER SOUND
SURROUND OFF
MORE

3. Press ▼/▲ to select DOLBY PRO LOGIC.

To cancel the function:
Select SURROUND OFF.

4. Press OK.

Note:
- If, while using this function, you connect headphones to the TV, the 3D HEADPHONE function (see above) activates automatically. However, note that you cannot use Dolby Pro Logic Surround with headphones. If SPEAKER is set to ON in the HEADPHONE menu, the HEADPHONE SURROUND function is not activated.

OTHER PREPARATION

EXT SETTING

You can select S-VIDEO or normal input for the EXT-2, EXT-3 and EXT-4 terminals, and you can give an EXT ID to each EXT input terminal.

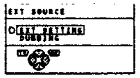
To select S-VIDEO input for a terminal

1. **Press OK.**

   The MENU appears.

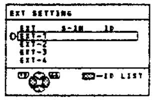
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**

   The EXT SOURCE menu appears.


EXT SOURCE
EXT SETTING
DUBBING

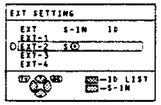
3. **Press ▼/▲ to select EXT SETTING, then press OK.**

   The EXT SETTING menu appears.


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
EXT-4
-ID LIST

4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press yellow button.**

   The S-VIDEO input indication appears.
   - To select normal input, press yellow button again.


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
EXT-4
-ID LIST
-S-IN

   - If you want to set an EXT ID here, perform the operation procedures from the step 4 of the section "To give an EXT ID to an EXT input terminal" in the next column.

6. **Press OK.**

   The menu disappears.

To give an EXT ID to an EXT input terminal

1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select EXT SOURCE, then press OK.**

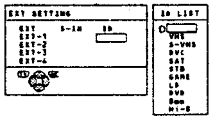
   The EXT SOURCE menu appears.

3. **Press ▼/▲ to select EXT SETTING, then press OK.**

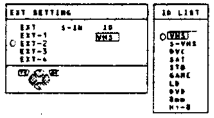
   The EXT SETTING menu appears.

4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press blue button.**

   The ID LIST appears.


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
EXT-4
ID LIST
VHS
S-VHS
DVC
SAT
STB
GAME
LD
DVD
8mm
Hi-8

6. **Press ▼/▲ to select a EXT ID.**


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
EXT-4
VHS
ID LIST
VHS
S-VHS
DVC
SAT
STB
GAME
LD
DVD
8mm
Hi-8

> ***Note:***
> - To erase the EXT ID, select a blank space.

7. **Press OK.**

● This completes the procedure. Press the TV button to exit the menu.

DUBBING

Select output to a VCR or other device connected to the EXT-2 terminal. Note that you cannot output from the EXT-2 terminal when the TV is turned off.

> ***Note:***
> - RGB signals from TV games and TELETEXT screens cannot be output from EXT-2 terminal.

1. **Press OK.**

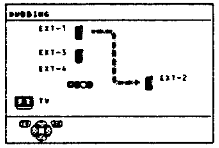
   The MENU appears.

2. **Press ▼/▲ to select EXT SOURCE, then press OK.**

   The EXT SOURCE menu appears.

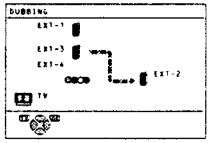
3. **Press ▼/▲ to select DUBBING, then press OK.**

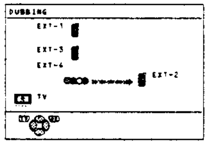
   The DUBBING menu appears.

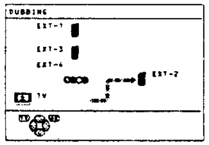

DUBBING
EXT-1
EXT-3
EXT-4
EXT-2
TV

4. **Press ▼/▲ to select the input which you want to output from EXT-2.**

   TV:
   The sound and picture of the currently selected PR channel is output from EXT-2, so you can record the output on a VCR connected to the EXT-2 terminal while watching a video input from the EXT-1, EXT-2 or EXT-4 terminal. Even when a SUB picture is displayed, the output TV broadcast PR channel does not change. However, when another PR channel is being watched in the SUB picture, if the SWAP function is used, the output TV broadcast PR channel is switched.


DUBBING
EXT-1
EXT-3
EXT-4
EXT-2
TV


DUBBING
EXT-1
EXT-3
EXT-4
EXT-2
TV


DUBBING
EXT-1
EXT-3
EXT-4
EXT-2
TV

5. **Press OK.**

   The menu disappears.

LANGUAGE

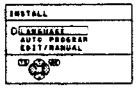
You can select one of ten languages for the on-screen display.

1. **Press OK.**

   The MENU appears.

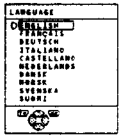
2. **Press ▼/▲ to select INSTALL, then press OK.**

   The INSTALL menu appears.


INSTALL
LANGUAGE
AUTO PROGRAM
EDIT/MANUAL

3. **Press ▼/▲ to select LANGUAGE, then press OK.**

   The LANGUAGE menu appears.


LANGUAGE
ENGLISH
FRANÇAIS
DEUTSCH
ITALIANO
CASTELLANO
NEDERLANDS
DANSK
NORSK
SVENSKA
SUOMI

4. **Press ▼/▲ to select a language.**
5. **Press OK.**

   This completes the setting.

AUTO PROGRAM

You can automatically allocate up to 99 stations to PR channels PR 1 to PR99 on this TV.
When the TV receives a signal describing the station's name, it allocates those stations, station IDs, and registers then as they were preset at the JVC factory.

1. **Press OK.**

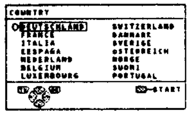
   The MENU appears.

2. **Press ▼/▲ to select INSTALL, then press OK.**

   The INSTALL menu appears.

3. **Press ▼/▲ to select AUTO PROGRAM, then press OK.**

   The COUNTRY menu appears.


COUNTRY
DEUTSCHLAND
FRANCE
ITALIA
ESPAÑA
NEDERLAND
BELGIUM
LUXEMBOURG
SWITZERLAND
DANMARK
SVERIGE
ÖSTERREICH
NORGE
SUOMI
PORTUGAL
-START

4. **Press ▼/▲ / ◀/▶ to select your country.**

> ***Note:***
> - If you make a mistake when selecting your country, or do not want to use the Automatic allocation function, press OK button to return to the INSTALL menu.

5. **Press blue button.**

   The PR channel is automatically set and the EDIT menu is displayed.
   - If you want to edit PR channels or allocate a station to PR0 (AV) channel, see page 24 "EDIT/MANUAL" for procedural description.

> ***Note:***
> - If a station you want to view is not allocated to a PR channel, perform Manual allocation (see page 26).

● The procedure is complete. Press the TV button to exit the menu.

EDIT/ MANUAL

You can change PR channel settings by doing any of the following:

- You can delete an unwanted station from a PR channel,
- You can change the PR channel number of a station,
- You can add station IDs to PR channels,
- You can add a new station to a PR channel, or
- You can manually allocate the desired station to a PR channel.

To edit PR channels

1. Press OK.

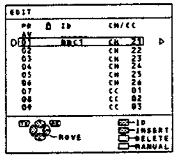
The MENU appears.

2. Press ▼/▲ to select INSTALL, then press OK.

The INSTALL menu appears.

3. Press ▼/▲ to select EDIT/ MANUAL, then press OK.

The EDIT menu appears.

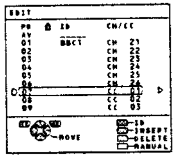

EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

4. Use any of the procedures described in the following pages to change the PR channel settings.

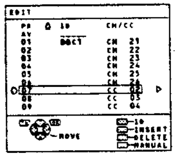
● This completes the procedure. Press the TV button to exit the menu.

To delete a station from a PR channel

1. Press ▼/▲ to select the station you want to delete.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

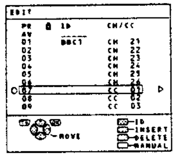
2. Press yellow button.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

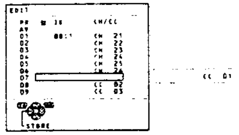
Note:
- Stations allocated to PR channels following the deleted PR channel number are shifted back by one to the preceding PR channel number.

To change the PR channel number of a station

1. Press ▼/▲ to select the station.

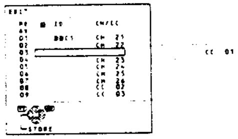

EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

2. Press ▶.

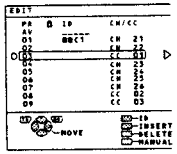

EDIT
STORE
CC 01

3. Press ▼/▲ to move the selected station to the desired PR channel number.

- To cancel the operation, press the ⓘ (Information) button.

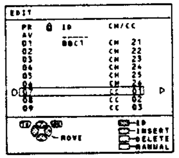

EDIT
STORE
CC 01

4. Press ◀.

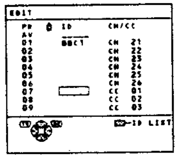

EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

To add a station ID to a station

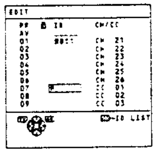
1. Press ▼/▲ to select the station.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

2. Press red button.

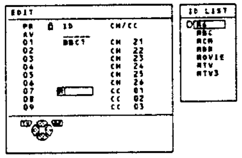

EDIT
PR ID CH/CC
ID LIST

3. Press ▼/▲ to select the first letter of the desired station's ID.


EDIT
PR ID CH/CC
ID LIST

4. Press blue button.

The ID LIST menu appears.

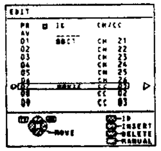

EDIT
PR ID CH/CC
ID LIST

5. Press ▼/▲ to select the station ID.

- To cancel the operation, press the ⓘ (Information) button.

6. Press OK.

Returns to the EDIT menu.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

Programming a station's ID manually:

Follow the operations below in place of steps 3 thru 5.

(1) Press the ▼/▲ button repeatedly to select a character.

(2) Press the ▶ button to move cursor to input position.

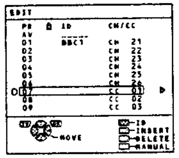
- Pressing the ◀ button moves the cursor backward.

(3) To complete station ID, follow steps (1) and (2) repeatedly.

- A station ID can have up to 5 characters.

To add a new station to a PR channel

1. Press ▼/▲ to select the row containing the PR channel number to which you want to add a station.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

2. Press green button.

3. Press ▼/▲ to display the enter number indicator.

CH: to add terrestrial broadcast stations

CC: to add cable TV stations

AV-32WP2EP, AV-32WZ2EP and AV-28WZ2EP only:

If COUNTRY is set to FRANCE, select one of the following four items:

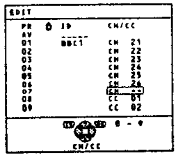
CH1: to add a system L terrestrial broadcast channel

CH2: to add a system B/G or I terrestrial broadcast channel

CC1: to add a system L cable TV channel

CC2: to add a system B/G or I cable TV channel

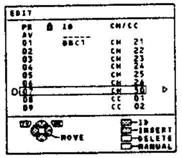
- To cancel the operation, press the ⓘ (Information) button.


EDIT
PR ID CH/CC
0 - 9
CH/CC

Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 31.

4. Press the number buttons to enter the channel number.

- To enter a one-digit channel number, enter the corresponding number and press OK button.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

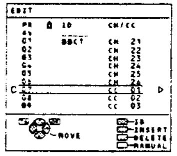
Note:
- When you add a station, the station preset to PR99 is deleted.

To manually allocate a station to PR channel (Manual allocation)

Condition:
- If your TV is AV-32WP2EP, AV-32WZ2EP or AV-28WZ2EP, you can manually allocate French channels to PR channels
  To manually allocate French stations to PR channels, you must set COUNTRY to FRANCE. If COUNTRY is set to any other country than FRANCE, perform "AUTO PROGRAM" steps 1 thru 4 on page 23 to set COUNTRY to FRANCE. Then press the OK button to return to the INSTALL menu. Finally perform "To edit PR channel" step 2 thru 3 on page 24 to return to the EDIT menu.

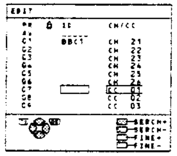
1. **Press ▼/▲ to select a PR channel number.**

Note:
- PR channel number "AV" appears on the screen as PR 0 channel. We recommend that you allocate this PR channel to a VCR connected to the aerial socket.



2. **Press blue button.**

Your TV enters the Manual allocation mode.



3. **Press green or red button to search for a station.**

Scanning stops when the TV receives a broadcast.
Press green or red button to search for another station, and keep searching until you see the station you want.

CH: Terrestrial broadcast stations
CC: Cable TV stations

If reception is poor:
Press the blue or yellow button to fine-tune the station.

If your TV is AV-32WP2EP, AV-32WZ2EP or AV-28WZ2EP:
When COUNTRY is set to FRANCE, the broadcast system is displayed as "(B/G)", "(I)" or "(L)" to the right of the PR channel number. If the signal of a station is incorrectly received, press the ▶ button to change the broadcast system and then repeat step 3.

Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 31.

4. **Press OK.**

The station is allocated to a PR channel.

PICTURE TILT
(except AV-28WZ2EN and AV-28WZ2EP)

The AV-32WP2EN, AV-32WP2EP, AV-32WZ2EN or AV-32WZ2EP has a large picture tube in which a picture could be tilted to the left or right because of magnetic pull from the earth. Use the procedure described below to adjust the picture.

Note:
- The AV-28WZ2EN or AV-28WZ2EP does not have the tilted image correction function.

1. **Press OK.**

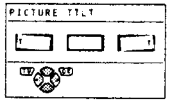
The MENU appears.

2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**

The PICTURE FEATURES menu appears.

3. **Press ▼/▲ to select PICTURE TILT, then press OK.**

The PICTURE TILT menu appears.



4. **Press ◀/▶ to select the direction to which you want to correct the tilted image on your screen.**

□ : *If it is inclined to the left, select this symbol to correct it.*
□ : *If it is inclined to the right, select this symbol to correct it.*
□ : *If it is not inclined to either the left or right, select this symbol to set it as it is.*

5. **Press OK.**

The correction is complete.

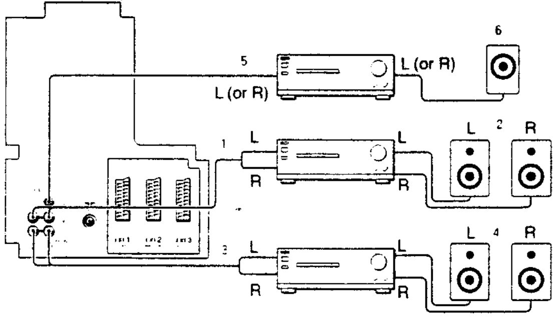
CONNECTING AMPLIFIERS AND SPEAKERS

Condition:
- When connecting audio amplifiers and speakers to your TV:
  - Turn the TV and audio amplifiers off before connecting them.
  - Set the audio amplifiers' volume to minimum.
  - Refer to manuals provided with the amplifier and speakers for further details.

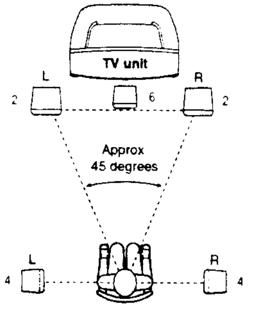
Notes:
- The AUDIO OUT terminals on your TV are for connecting to an audio system. The output level is controlled by the Volume controls of your TV.
  The signal from the AUDIO OUT terminals will not cut off when headphones are connected.
- If you connect a Dolby Pro Logic Surround decoder to your TV, use the FRONT L and R jacks. Your TV has Dolby Pro Logic Surround functions, so if you connect an external decoder, turn off all surround function on your TV.

①, ③: Stereo amplifier
②: Front speakers (magnetic-shielded type, L, R)
④: Surround speakers (L, R)
⑤: Stereo amplifier (or monaural amplifier)
⑥: Centre speaker (magnetic-shielded type)

(Terminals on rear)



Positioning speakers



Notes:
- For a good effect, place speakers ④ 1.0 m above the seated listener's head.
- For a good effect, place speaker ⑥ as close as possible to the TV along the same line as or behind, speakers ②.
- Use magnetic-shielded speakers for speakers ② and ⑥ to avoid TV interference.

To use 2 external speakers

You can cut off the sound output from the TV's speakers and enjoy sound from external front speakers.

1. **Connect stereo amplifier ① and front speakers ② to your TV.**

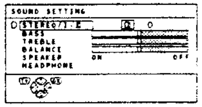
2. **Turn your TV on, and press the Volume –/+ button to set the volume to the lowest setting.**

3. **Press OK.**

The MENU appears.

4. **Press ▼/▲ to select SOUND SETTING, then press OK.**

The SOUND SETTING menu appears.



Note:
- When DOLBY PRO LOGIC or PRO LOGIC 3D-PHONIC is selected in DIGITAL SURROUND menu, "SPEAKER" does not appear. In this case, press the OK button to exit the current menu. Then, press the 3D button twice to select SURROUND OFF and repeat from Step 3.

5. **Press ▼/▲ to select SPEAKER.**

6. **Press ◀/▶ to select OFF.**

The TV's speakers become silent.

To output sound from the TV speakers:
Set SPEAKER to ON.

7. **Press OK.**

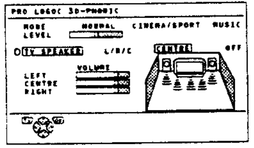
The menu disappears.

When using the TV speakers as the centre speaker:
When enjoying the DOLBY PRO LOGIC 3D-PHONIC surround sound, it can be set so that 2 external speakers and the TV speakers (used as the centre speaker) can be used at the same time.

(Continued to the next page)

In particular, since models other than AV-32WP2EN and AV-32WP2EP do not have a centre speaker built-in to the TV, if this method is used the "dialogue" becomes clearer.

1. **Press OK.**
   The menu appears.
2. **Press ▼/▲ button to select DIGITAL SURROUND, then press OK.**
   The DIGITAL SURROUND menu appears.
3. **Press ▼/▲ button to select PRO LOGIC 3D-PHONIC, then press ▶.**
   The PRO LOGIC 3D-PHONIC menu appears.



4. **Press ▼/▲ button to select TV SPEAKER, then press ◀/▶ button to select CENTRE.**
5. **Press OK.**
   The menu disappears.

8. **Turn your audio amplifier on, and return the volume of your audio amplifier to the normal setting.**

> ***Note:***
> - Take care not to set the volume of your audio amplifier too high as this may damage your speakers.

9. **Press the Volume –/+ button to adjust the volume.**

● This completes the procedure.

To use 4 or 5 speakers

You can enjoy Dolby Pro Logic Surround sound with 4 or 5 speakers.

1. **Connect audio amplifiers and speakers to the TV.**

Do one of the following:

A: Connect stereo amplifier 3 and surround speakers 4.
- If your TV is AV-32WP2EN or AV-32WP2EP, it has a centre speaker built-in and you can easily enjoy Dolby Pro Logic surround sound using 5 speakers.
- If your TV is not AV-32WP2EN or AV-32WP2EP, although it does not have a centre speaker built-in to the TV, you can easily enjoy Dolby Pro Logic surround sound by using the PHANTOM mode which omits the centre speaker.

B: Connect stereo amplifiers 1, 3, front speakers 2, and surround speakers 4. This uses the TV's speakers as the centre speakers.

C: Connect stereo amplifiers 1, 3, stereo amplifier (or monaural amplifier) 5, front speakers 2, surround speakers 4, and centre speaker 6. If you use this method, do not output sound from the TV's speakers.

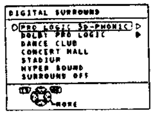
2. **Turn your TV on, and press the Volume –/+ button to set the volume to the normal setting.**

3. **Press OK.**

The MENU appears.

4. **Press ▼/▲ to select DIGITAL SURROUND, then press OK.**

The DIGITAL SURROUND menu appears, showing the currently selected setting.

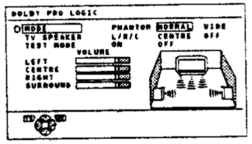


> ***Note:***
> - If DIGITAL SURROUND does not appear, disconnect the headphones from the TV.

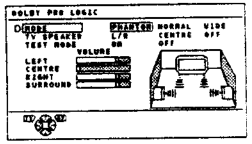
5. **Press ▼/▲ to select DOLBY PRO LOGIC, then press ▶.**

The DOLBY PRO LOGIC menu appears.

In the case of AV-32WP2EN or AV-32WP2EP:



In the case of models other than AV-32WP2EN and AV-32WP2EP:



6. **Press ▼/▲ to select an item, and press ◀/▶ to change its setting.**

In the case of AV-32WP2EN or AV-32WP2EP:

Method	Item	
	MODE	TV SPEAKER
A	NORMAL	L/R/C
B	NORMAL	CENTRE
C	NORMAL	OFF
	WIDE	

In the case of models other than AV-32WP2EN and AV-32WP2EP:

Method	Item	
	MODE	TV SPEAKER
A	PHANTOM	L/R
B	NORMAL	CENTRE
C	NORMAL	OFF
	WIDE	

> ***Notes:***
> - Set MODE to WIDE when using a full-range speaker as the centre speaker. Frequencies of 100 Hz or lower are output from the centre speaker to give Dolby Surround an even greater impact.

> - Since AV-32WP2EN and AV-32WP2EP have a centre speaker built-in to the TV, it is not necessary to select the PHANTOM mode. If the PHANTOM mode is selected, sound is prevented from coming out of the centre speaker.

7. **Turn your audio amplifier on, and return the volume of your audio amplifier to the normal setting.**

> ***Note:***
> - Take care not to set the volume of your audio amplifier too high as this may damage your speakers

8. **Press ▼/▲ to select TEST MODE.**

9. **Press ◀/▶ to set TEST MODE to ON.**

Test signals alternate among the speakers.

> ***Note:***
> - If the test signal level is small to listen to, adjust it with the volume of your audio amplifier. However, take care not to set the volume too high as this may damage your speakers.

10. **Press ◀/▶ to adjust the level of each of the speakers so that their volumes are the same at the listening position (the place where the person is sitting in the diagram, see page 27).**

LEFT, RIGHT:
Front speaker L, R

CENTRE:
Centre speaker

SURROUND:
Surround speakers

> ***Notes:***
> - When MODE is set to PHANTOM, the volume of CENTRE: (Centre speaker) cannot be adjusted.
> - If the volume of both speakers is not the same even after adjusting the volume, adjust the volume of your audio amplifier.

11. **Press OK.**

The menu disappears.

● This completes the procedure.

TROUBLESHOOTING

- If the plug is disconnected from the AC socket, or the TV aerial has problems, you may think there is a problem with the TV itself. Be sure to check the following before calling for service.

IMPORTANT
- Review all instructions in this manual.

	Problem	Action
■ **GENERAL**	No power supply.	Insert the plug in an AC socket. Press the Main power button (see page 6).
	No picture or sound.	Check aerial connections (see page 4). Press the number 0 button to select the correct mode (see page 10). Select the correct colour system manually (see page 11).
	The power shuts off automatically.	Press the Standby button to turn the power on again (see page 6)
	Inoperable remote control.	Replace the batteries (see page 2). Insert the batteries correctly (see page 2). Use the remote control within about 7 metres of the TV.
	MENU can not be displayed.	Are you watching the Teletext screen? None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.
■ **PICTURE**	Poor colour.	Adjust COLOUR and BRIGHT (see page 12). Select the correct colour system manually (see page 11).
	The screen mode suddenly changed.	The ZOOM mode's automatic selective function is working (see page 13).
	The picture is tilted (AV-32WP2EN/EP, AV-32WZ2EN/EP only).	Use the PICTURE TILT to correct the tilt (see page 26).
	The SUB-picture image is disordered.	If the MAIN-picture image signal condition is bad, the SUB-picture image may be disordered. If the MAIN-picture image signal condition is improved, the SUB-picture image also improves.
	The top and bottom of the MAIN-picture or SUB-picture are missing.	If the picture standard of the MAIN-picture and SUB-picture are different, the top and bottom of one of them may be missing.
	The SUB-picture display suddenly disappears.	If an external device is operated, the SUB-picture may disappear. If this happens, press the PIP button once more and redisplay the SUB-picture.

	Problem	Action
■ **PICTURE**	The same image is displayed in both the MAIN-picture and SUB-picture.	If the SWAP button is pressed when the image from the external decoder is displayed in the MAIN-picture, the same image is displayed in both the MAIN-picture and SUB picture. If the SWAP button is pressed once more, the previous state is returned to.
	Lines or streaks in picture (interference).	Move the components apart until the interference is eliminated. Reposition the aerial.
	Spots (crosstalk).	Reposition the aerial. Replace with an aerial with better directionality.
	Double pictures (ghosts).	Reposition the aerial. Replace with an aerial with better directionality.
	Snowy pictures (noise).	Check aerial connections. Redirect the aerial. Replace or repair the aerial.
	The screen turns blue.	The BLUE BACK function is on (see page 16).
■ **SOUND**	No sound from the TV's speakers.	Disconnect the headphones. If you want to have sound come from both the TV's speaker and headphones, set TV SPEAKER in the HEADPHONE menu to ON. (See page 8.) Set SPEAKER to ON (see page 27).
	The headphone volume level can not be adjusted.	It can not be adjusted with the Volume –/+ button. Adjust it with the VOLUME function in the HEADPHONE menu. (See page 8.)
	The sound from the TV does not stop even if the headphones are connected.	TV SPEAKER in the HEADPHONE menu is set to ON. Change the setting to OFF. (See page 8.)
	No stereo sound.	Change STEREO/I•II to ꝏ mode (see page 11). Is TV SPEAKER on the PRO LOGIC 3D-PHONIC menu or DOLBY PRO LOGIC menu set to CENTRE? Change the TV SPEAKER setting to L/R/C or L/C. (See pages 27 and 28.) When the SUB-picture is in TV mode, the SUB-picture sound is monaural only.
	No "SUB-I" or "SUB-II" sound in a multisound broadcast.	Change STEREO/I•II to the correct mode (see page 11). The Multi sound function does not work for the SUB-picture sound.
	Surround function does not function properly.	Dolby Pro Logic Surround and DOLBY PRO LOGIC 3D-PHONIC work properly only with Dolby Surround encoded programmes. Functions other than HYPER SOUND and the Headphone surround functions work properly only with stereo programmes. HYPER SOUND works properly only with monaural programmes. None of the surround sound functions work for the SUB picture sound.
	The POWER BASS function does not work.	Are you listening to the SUB picture sound? The POWER BASS function does not work for the SUB picture sound.
■ **TELETEXT**	No teletext reception.	Tune to a teletext broadcast channel (see page 18). We recommend that you not videotape teletext, as it may not be recorded correctly.
	The current time is not displayed.	Tune to a teletext broadcast channel (see page 16).

The following are normal and are NOT malfunctions:

- When you touch the CRT surface, you might feel a slight charge of static electricity. This is because the CRT contains static electricity; it does not affect the human body.
- The TV may emit a crackling sound due to a sudden change in temperature. There is no problem unless the picture or sound is abnormal.
- When a bright a still image (of a white dress, for example) appears on the screen, the image may be coloured. This problem occurs in all CRTs, and as the bright image disappears, such colouration also disappears.
- This TV is equipped with a microcomputer that may operate abnormally due to interference from external components. If this happens, turn off the main power and disconnect the power cord from the AC socket. Then reconnect the power cord to AC socket and turn on the main power again.

Channel table

- The following table shows the relationship between the displayed CH/CC channel number and the actual channel number.
- The actual channel numbers for the "CC" channel numbers from CC110 to CC161 differ depending on the cable TV station. Check which actual channel numbers correspond to which "CC" channels while referring to the broadcast frequencies which are indicated in the channel tables of each cable TV station. If you can not find the broadcast frequency for a channel, contact the cable TV station.

CH	Channel	CH	Channel	CC	Channel	CC	Channel
CH 02 / CH 202	E2	CH 40 / CH 240	E40	CC 01 / CC 201	S1	CC 31 / CC 231	S31
CH 03 / CH 203	E3, ITALY A	CH 41 / CH 241	E41	CC 02 / CC 202	S2	CC 32 / CC 232	S32
CH 04 / CH 204	E4, ITALY B	CH 42 / CH 242	E42	CC 03 / CC 203	S3	CC 33 / CC 233	S33
CH 05 / CH 205	E5, ITALY D	CH 43 / CH 243	E43	CC 04 / CC 204	S4	CC 34 / CC 234	S34
CH 06 / CH 206	E6, ITALY E	CH 44 / CH 244	E44	CC 05 / CC 205	S5	CC 35 / CC 235	S35
CH 07 / CH 207	E7, ITALY F	CH 45 / CH 245	E45	CC 06 / CC 206	S6	CC 36 / CC 236	S36
CH 08 / CH 208	E8	CH 46 / CH 246	E46	CC 07 / CC 207	S7	CC 37 / CC 237	S37
CH 09 / CH 209	E9, ITALY G	CH 47 / CH 247	E47	CC 08 / CC 208	S8	CC 38 / CC 238	S38
CH 10 / CH 210	E10, ITALY H	CH 48 / CH 248	E48	CC 09 / CC 209	S9	CC 39 / CC 239	S39
CH 11 / CH 211	E11, ITALY H+1	CH 49 / CH 249	E49	CC 10 / CC 210	S10	CC 40 / CC 240	S40
CH 12 / CH 212	E12, ITALY H+2	CH 50 / CH 250	E50	CC 11 / CC 211	S11	CC 41 / CC 241	S41
CH 21 / CH 221	E21	CH 51 / CH 251	E51	CC 12 / CC 212	S12	CC 75 / CC 275	X
CH 22 / CH 222	E22	CH 52 / CH 252	E52	CC 13 / CC 213	S13	CC 76 / CC 276	Y
CH 23 / CH 223	E23	CH 53 / CH 253	E53	CC 14 / CC 214	S14	CC 77 / CC 277	Z, ITALY C
CH 24 / CH 224	E24	CH 54 / CH 254	E54	CC 15 / CC 215	S15	CC 78 / CC 278	Z+1
CH 25 / CH 225	E25	CH 55 / CH 255	E55	CC 16 / CC 216	S16	CC 79 / CC 279	Z+2
CH 26 / CH 226	E26	CH 56 / CH 256	E56	CC 17 / CC 217	S17		
CH 27 / CH 227	E27	CH 57 / CH 257	E57	CC 18 / CC 218	S18		
CH 28 / CH 228	E28	CH 58 / CH 258	E58	CC 19 / CC 219	S19		
CH 29 / CH 229	E29	CH 59 / CH 259	E59	CC 20 / CC 220	S20		
CH 30 / CH 230	E30	CH 60 / CH 260	E60	CC 21 / CC 221	S21		
CH 31 / CH 231	E31	CH 61 / CH 261	E61	CC 22 / CC 222	S22		
CH 32 / CH 232	E32	CH 62 / CH 262	E62	CC 23 / CC 223	S23		
CH 33 / CH 233	E33	CH 63 / CH 263	E63	CC 24 / CC 224	S24		
CH 34 / CH 234	E34	CH 64 / CH 264	E64	CC 25 / CC 225	S25		
CH 35 / CH 235	E35	CH 65 / CH 265	E65	CC 26 / CC 226	S26		
CH 36 / CH 236	E36	CH 66 / CH 266	E66	CC 27 / CC 227	S27		
CH 37 / CH 237	E37	CH 67 / CH 267	E67	CC 28 / CC 228	S28		
CH 38 / CH 238	E38	CH 68 / CH 268	E68	CC 29 / CC 229	S29		
CH 39 / CH 239	E39	CH 69 / CH 269	E69	CC 30 / CC 230	S30		

(Continued to the next page)

Channel table

CH	Channel
CH 102	F2
CH 103	F3
CH 104	F4
CH 105	F5
CH 106	F6
CH 107	F7
CH 108	F8
CH 109	F9
CH 110	F10
CH 121	F21
CH 122	F22
CH 123	F23
CH 124	F24
CH 125	F25
CH 126	F26
CH 127	F27
CH 128	F28
CH 129	F29
CH 130	F30
CH 131	F31
CH 132	F32
CH 133	F33
CH 134	F34
CH 135	F35
CH 136	F36
CH 137	F37
CH 138	F38
CH 139	F39
CH 140	F40
CH 141	F41
CH 142	F42
CH 143	F43
CH 144	F44
CH 145	F45
CH 146	F46
CH 147	F47
CH 148	F48
CH 149	F49
CH 150	F50
CH 151	F51
CH 152	F52
CH 153	F53
CH 154	F54
CH 155	F55
CH 156	F56
CH 157	F57
CH 158	F58
CH 159	F59
CH 160	F60
CH 161	F61
CH 162	F62
CH 163	F63
CH 164	F64
CH 165	F65
CH 166	F66
CH 167	F67
CH 168	F68
CH 169	F69

CC	Frequency (MHz)
CC 110	116 - 124
CC 111	124 - 132
CC 112	132 - 140
CC 113	140 - 148
CC 114	148 - 156
CC 115	156 - 164
CC 116	164 - 172
CC 123	220 - 228
CC 124	228 - 236
CC 125	236 - 244
CC 126	244 - 252
CC 127	252 - 260
CC 128	260 - 268
CC 129	268 - 276
CC 130	276 - 284
CC 131	284 - 292
CC 132	292 - 300
CC 133	300 - 306
CC 141	306 - 311
CC 142	311 - 319
CC 143	319 - 327
CC 144	327 - 335
CC 145	335 - 343
CC 146	343 - 351
CC 147	351 - 359
CC 148	359 - 367
CC 149	367 - 375
CC 150	375 - 383
CC 151	383 - 391
CC 152	391 - 399
CC 153	399 - 407
CC 154	407 - 415
CC 155	415 - 423
CC 156	423 - 431
CC 157	431 - 439
CC 158	439 - 447
CC 159	447 - 455
CC 160	455 - 463
CC 161	463 - 469

SPECIFICATIONS

Model / Item	AV-32WP2EN	AV-32WZ2EN	AV-28WZ2EN
TV RF systems	CCIR B/G		
Colour systems	PAL, SECAM (NTSC 3.58 / 4.43 MHz only in EXT modes)		
Channels and frequencies	E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2		
Sound-multiplex systems	A2/NICAM system		
Teletext systems	Fastext (United Kingdom system) / TOP (German system) / WST (standard system)		
Power requirements	AC 220 – 240 V, 50 Hz		
Power consumption	Maximum 266 W, Average 161 W, Standby 0.8 W	Maximum 248 W, Average 151 W, Standby 0.8 W	Maximum 242 W, Average 147 W, Standby 0.8 W
Picture tube size	Visible area 76 cm (measured diagonally)		Visible area 66 cm (measured diagonally)
Audio output	Rated Power output 20 W + 20 W + 5 W	Rated Power output 20 W + 20 W	
Speakers	10 cm round × 2, 3.5 cm round × 2, (10 cm × 3 cm oval) × 1	10 cm round × 2, 3.5 cm round × 2	
External input / output	EXT-1, EXT-2, EXT-3	21-pin Euroconnector (SCART)	
	EXT-4	VIDEO IN (RCA) AUDIO L / R IN (RCA) S-VIDEO IN (Mini Din 4-pin)	
	AUDIO OUT	(Variable out (0-1 Vrms), low impedance) CENTRE output (RCA) FRONT L/R output (RCA) SURROUND REAR L/R output (RCA)	
	Headphone jack (stereo mini jack, dia. 3.5 mm)		
Dimensions (W × H × D)	805 mm × 550 mm × 550 mm		716 mm × 489 mm × 496 mm
Weight	50.3 kg	50.2 kg	36.3 kg
Accessories	Remote control unit RM-C791 × 1 AAA (R03) dry cell battery × 2	Remote control unit RM-C793 × 1 AAA (R03) dry cell battery × 2	

Design and specifications subject to change without notice.

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